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Henry Horace Morris. —

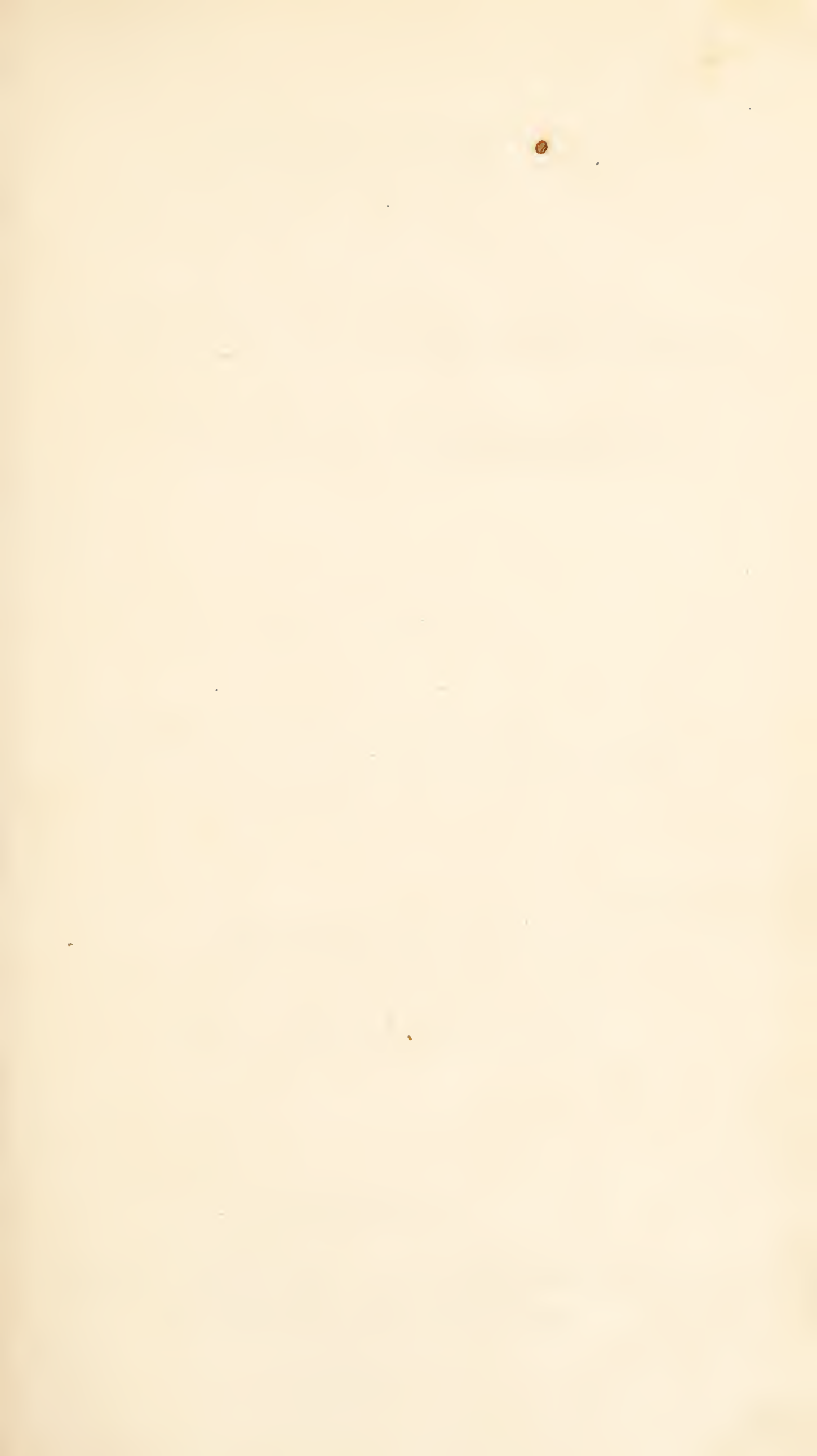
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BACCHUS:

AN ESSAY ON THE NATURE, CAUSES, EFFECTS,
AND CURE OF INTEMPERANCE.

BY

RALPH BARNES GRINDROD, LL.D.

SECOND EDITION.

CAREFULLY REVISED AND GREATLY ENLARGED.

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AND SOLD BY ALL BOOKSELLERS.

1843.



THIS WORK
IS RESPECTFULLY DEDICATED TO THE
OFFICERS AND MEMBERS OF
THE AMERICAN TEMPERANCE SOCIETIES,
WHOSE UNPARALLELED EXERTIONS
IN THE
CAUSE OF MORALS AND RELIGION,
AND WHOSE EFFORTS TO EXTERMINATE
THE
MOST FRUITFUL SOURCE OF HUMAN MISERY,
THE USE OF INTOXICATING LIQUORS,
WILL EVER ENSURE THEM
THE GRATEFUL AFFECTIONS OF MANKIND,
AND THE
REGARD AND ADMIRATION
OF
POSTERITY.

THE NEW BRITISH AND FOREIGN TEMPERANCE SOCIETY.

PRIZE ESSAY.

THE Committee of the above Society give notice, that they have come to a resolution to offer a Premium of One Hundred Sovereigns for the best Essay on the Benefits of Total Abstinence from all Intoxicating Drinks

1. The Essay must be written in a Christian spirit, and with a design to benefit the bodies, circumstances, and souls of men.

2. The proposed Essay will contain the origin, progress, and consequences of the customs of *drinking* and drunkenness, both from sacred and profane history.

3. It will comprise the medical opinions of the faculty, ancient and modern; with the sentiments of magistrates, judges, and the most eminent literary, scientific, and theological writers.

4. It will produce Scripture testimony, that, although the use of wine is not prohibited, except in certain cases and under certain circumstances, Total Abstinence from all intoxicating drinks is encouraged.

5. It will contain statistical accounts of the evil effects of drinking customs on the habits, wealth, morals, and religious feelings of the community; embracing the experience of other nations on these topics.

6. It will contain details of committals, punishments, and miseries arising from drunkenness.

7. It will present the amount of loss of property, time, and intellect to the British nation, by their use.

8. It will show how the various religious societies for the renovation of the world are impeded by the drinking habits of the population.

9. It will present, in an inviting manner, the vast blessings which result to families, masters, mistresses, servants, fathers, mothers, and children, and to some of the most degraded individuals, from the total disuse of intoxicating drinks.

10. It will also show the advantages that will accrue to trade, commerce, and the shipping interest; to the arts and sciences; and the immense moral benefits it will confer on the nation and the world.

ADJUDICATORS—The Rev. Theodore Dury, M.A., Rector of Keighley; Rev. J. H. Hinton, M.A.; and J. E. Howard, Esq.

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BACCHUS.

DIVISION THE FIRST.

SECTION I.

NATURE AND CHARACTERISTICS OF INTEMPERANCE.

"Temperance does not so much consist in the QUANTITY as in the QUALITY of aliment."—CULLEN.

"Men may lose their health without losing their senses, and be intemperate every day without being drunk perhaps once in their lives."—SIR WILLIAM TEMPLE.

I. Introductory Observations, &c.—II. Definitions of moderate drinking in various ages of the world.—III. The free use of strong drink by those who denominate themselves sober and temperate members of society.—IV. Difference between medicinal substances and articles of diet.—V. Distinction between intemperance and drunkenness.—VI. Opinions of eminent medical men on the physical evils consequent on moderate drinking.—VII. Definitions of temperance.—VIII. The use of a bad thing distinguished from the ABUSE of a good thing.—IX. Characteristics of intemperance.—1. The use of intoxicating liquors an acquired habit.—2. Fascinating influence of inebriating liquors.—3. Intemperance not confined to climate.—4. Intemperance common to savage and civilized nations—to the illiterate and the educated.—5. Effects of strong drink on various temperaments.—6. Modifications produced by various kinds of intoxicating drinks.—7. Changes effected in the temperament by the use of inebriating liquors.

I. THE term INTEMPERANCE, according to its general signification, is indefinite and unsatisfactory. In the present day, however, it is almost exclusively and universally employed in reference to *excess in the use of intoxicating liquors*.

The limits of lawful indulgence have, in all ages of the world, been variously defined. In a primeval state, man had few wants. His occupations were simple in their character and influence. The produce of the field, and the fruit of the trees yielded him suitable nourishment; water supplied him with a refreshing and innoxiously inspiring beverage. Lucretius thus adverts to the simple food of primitive times :—

"Quæ sol atque imbres dederant, quod terra crearet,
Sponte suâ, satis id placebat pectora donum."

In this state of virtuous simplicity, man had few temptations to lead him astray. In

progress of time, however, *new* and unlawful sources of enjoyment were discovered, luxurious customs began to prevail, intoxicating liquors were produced, diseases were generated, and vicious habits followed in their train.

Luxury, in its early approaches, has, in general, been characterized by its slow and insinuating progress. Virtuous habits gradually yield to the forms and practices of sensual gratification. A deterioration of the moral sense, invariably follows concessions to sensual indulgence. The history of the nations of antiquity, and in particular of the Greeks and Romans, demonstrates the truth of this statement.

The effects of strong drink were known to the ancients as inimical to freedom and national prosperity. To prevent intemperance, laws were framed against the importation of wine. The ancient *Suevi*, for example, prohibited its introduction into their country, believing it to be pernicious to the vigour, both of the body and of the mind.* Similar laws are found among the primitive regulations of other nations.

Until influenced by impure motives, these sanative enactments were rigorously enforced. As an increased taste for luxury, however, began to prevail, the primitive aversion to wine gradually wore away. The deadly enemy became a cherished friend. Those admirable laws which had once been the safeguards of national virtue and prosperity were finally modified, relaxed, and virtually annulled. The consequences were degradation and ruin.

It is manifest, that in every period of the world, the prevailing notions concerning the nature of temperance and intemperance, *have arisen and taken their tone, from the moral condition of the existing age*. The inclinations and appetites of mankind insensibly influence their opinions, and from such a source, has the world too frequently

* Vinum ad se omninò importari non sinunt, quòd eâ re ad laborem ferendum remollescere Homines, atque effœminari arbitrantur.—CÆSAR DE BELL. Gall. lib. 4.

derived its notions of the subject under consideration.

The language of our poets precisely accords with the popular and crude notions of the times. The *moderate* use of intoxicating liquors (a vague and unsatisfactory mode of expression), receives unqualified commendation—excess alone incurs blame. In the words of one of our most valued writers, they advocate

"The rule of not *too much*—by temperance taught."

Thus, Shakspeare—

"Every *inordinate* cup is unblest, and the ingredient is a—devil."

Armstrong, sometimes denominated the Poet of Health, exclaims—

"We curse not wine;—the vile *excess* we blame."

Rarely do any of our writers refer to the *nature* of these liquors, and the tendency to excess which inseparably connects itself with moderate indulgence. Unfortunately, indeed, for the interests of mankind, the effusions of not a few of our poets too frequently contain sentiments at variance with the sober realities of experience, and too little in accordance with the pure principles of morals and religion.

II. Democritus wrote a volume, with the design to show that no person ought to exceed four or six glasses of wine. Epictetus advances the following opinion:—"That man is a drunkard who takes more than three glasses; and though he be not drunk, he hath exceeded moderation."*

Panyasis, however, a Greek writer, allows indulgence in two cups only; those, he remarks, who proceed to a third cup, dedicate it to *lust* and *strife*.†

Athenæus preserves the following verses of Eubulus, a writer of Greek Comedy. Bacchus thus speaks:—

"Only *three* cups for prudent men I mix:
For health the one, which first they quaff: the second
For love and pleasure; and the third for sleep;
Which they, who are by reason's name distinguish'd,
No sooner drink, but home they bend their steps.
A fourth would ill become us, 'tis the cup
Of contumely; the unseemly din
Of uproar marks the fifth; debauch the sixth;
Blows and black eyes the seventh; with the eighth
In comes the constable; the ninth engenders
Fell rancour; but the tenth is madness 'self,
Whose desperate fury prompts to deeds of blood."

In comparatively modern times, striking examples are presented of the morals of the age, influencing considerations concerning the nature of temperance. A society, for instance, established about the sixteenth century, for the promotion of temperance, had its fundamental law constituted on the principle, that none of its members should drink more than *fourteen glasses* of wine daily. A certain general, in one of his regulations, ordered, that no officer who dined at his table should exceed *two bottles*

of wine. Dr. Trotter, who adverts to this circumstance with somewhat of astonishment, records it as an honour to the British Navy, that in his time, the commanders in chief never allowed more at their tables than *half a bottle* to each guest.*

The writings of distinguished authors of the present day, assign curious and certainly untenable limits, to what some persons are pleased to denominate moderate drinking. Dr. Sigmond, Professor of Materia Medica to the Royal Medico-Botanical Society, in his Essay on Tea, recommends to those who are "engaged in occupations which do not demand any very extraordinary exertions, either of body or mind," "*a gentle stimulus of three or four glasses of wine during the great meal of the day*;" a practice which he further states does not "trespass on the limits of moderation," and is moreover productive of a general state of health as well as longevity. "After *the meal*," says the same writer, "when some little time has elapsed, *two or three glasses of port produce no ill effects!*" &c. It is but proper, however, to state that opinions like those propounded by Dr. Sigmond, alike unphilosophical and contrary to experience, are less entertained by medical men in the present day than they were at a more remote period, and ere long, it is to be hoped, that as the light of truth diffuses its influence, they will be altogether discarded from the medical profession.

The formation of Temperance Societies in this country and in America, in the present century, forms a striking illustration. Many of these institutions had merely an ephemeral existence. Of those established, one class had for its object the advancement of temperance, by inculcating the moderate use of all kinds of intoxicating liquors. Another class, still in operation, has for its fundamental regulation the moderate use of fermented liquors, but abstinence from ardent spirits. These societies evidence the existence, not only of erroneous notions concerning the nature and effects of intoxicating liquors, but the very general and deep-rooted appetite which exists for artificial and stimulating drinks.

The members of one of these short-lived societies were required to pledge themselves to abstain altogether from the use of ardent spirits, and to confine themselves to the use of "one quart of beer, porter, or ale, or three glasses of wine per day," which quantity was to be so partitioned as not to be taken at one and the same time. The secretary of this society, states that this pledge was instituted with the view to yield to the prejudices of those persons who advocate the moderate (!) use of intoxicating liquors.

III. An examination of these facts, irresistibly forces the conviction upon all unprejudiced minds, that the inclinations and

* Fragments, No. 3. Carter's Transl. 1753. p. 112.

† Archæologia Græca. Vol. 2, p. 396.

* Trotter's Essay on Drunkenness, p. 157.

appetites of mankind have invariably influenced their opinions in relation to the nature and limits of temperance. The consequences of these latitudinarian notions, are witnessed in the free use of strong drink in the present day, by those who deem themselves temperate and sober members of society.

Dr. Trotter very appropriately assigns to this class of men, the appellation of *sober drunkards*. "It is not drinking spirituous liquors," he remarks, "to the length of intoxication, that, alone, constitutes intemperance. A man may drink a great deal—pass a large portion of his time at the bottle, and yet be able to fill most of the avocations of life. There are certainly many men of this description, who have never been so transformed with liquor as to be unknown to their own house dog, or so foolish in their appearance, as to be hooted by school-boys, that yet are to be considered as intemperate livers. These "sober drunkards," if I may be allowed the expression, deceive themselves as well as others; and though they pace slowly along the road to ruin, their journey terminates at the goal, bad health."*

The existence of *sober drunkards* at an earlier period of our history is testified by Tryon, in a scarce work published A.D. 1683, under the name *Philotheos Physiologus*, and entitled "The way to Health, Long Life and Happiness, or a Discourse of Temperance." "In former days," says this writer, "*Canary* (wine) was chiefly sold by the apothecaries. The name and use of *brandy* was not known till of late; but now the excess of all these things is become almost general, amongst all sorts of people, even amongst those that count themselves most sober and religious, and who should set examples of temperance to others, it not being esteemed any sin to smoke two, three, or four pipes of *tobacco* at a sitting, and carouse *strong drink, brandy, wine*, and the like, in perfect health, and when need or nature doth not require such things; and yet think all's well, if they can but follow their outward occasions, and keep themselves from being drunk, they never regard it, though one of them do destroy of God's good creatures as much in one day, both in value, quantity, and quality, as would suffice five or six. Still, I say, all this is not reckoned any sin amongst many thousands of those counted sober people; the common custom and frequent use of these intemperances hides the evil of them."†

A further and candid examination of this subject, leads us to reflect on the astounding, but incontestible fact, that *those persons in general termed temperate, consume a larger proportion of inebriating*

liquor, than those individuals who are usually denominated drunkards. A great proportion of those who are known to be drunkards, are not in general habitual slaves to this most debasing vice. During their fits of intemperance, these persons consume a large quantity of intoxicating liquor. On ordinary occasions, they do not indulge in the use of strong drink to any serious extent. The former section of society, however, drink considerably less at stated times; but, by the accumulating amount of habitual and frequent repetition, consume a quantity, which, on calculation, appears almost incredible. The individual, for example, who indulges in but one glass of ardent spirit, or what amounts to the same thing, in two or three glasses of wine daily; consumes, in the course of ten years, not less a quantity than *thirty gallons of pure alcohol, or spirits of wine*; a poison well known to be most dangerous and fatal in its character. And yet the consumption of this quantity is far from being considered either as improper or intemperate. The most strenuous advocates of the moderate use of intoxicating liquor, would not, it is presumed, object to the daily apportionment of a pint of ale to each adult member of the human family—an allowance, which, in the course of one year, would amount to forty-three gallons, or about five gallons of proof spirit! These, and similar illustrations, sufficiently demonstrate the fact, that those individuals, commonly denominated drunkards, do not invariably consume the largest portion of alcoholic stimulants.

IV. From the preceding observations it will be seen how impossible it is to arrive at a correct definition of the nature of intemperance, from the uncertain and ever-varying opinions and practices of the age. Chemical and physiological knowledge alone supply us with the requisite data. The most important distinction between the temperate and intemperate employment of articles of food and drink, consists in their relative use in supplying the system with its *natural requirements*; in other words, in affording to the human frame, suitable food or nourishment. Some substances are proper as *articles of diet*, when used in moderate quantities, or to such extent as nature requires: others, on the contrary, are useful only as *medicines* when employed occasionally, and with judgment. The great distinction between these two divisions, obviously consists in the circumstance, that the one contains matter capable of becoming a part of, and, consequently, of adding nourishment to, the corporeal system. The other, exercises a specific or medicinal influence on some part or parts, of the human frame; but it does not become assimilated with it. Arsenic, for example, has a powerful and peculiar influence on the human system; but it is not capable of being

* Trotter on Drunkenness, p. 177.

† Way to Health, &c., Chap. vi. p. 163.

assimilated with it. Alcohol, in whatever combination, is similar in its operation. It *stimulates* or increases the action of the parts with which it comes in contact; but it is not added to, or identified with them. It cannot consequently furnish an *increase of the powers of life*; or indeed produce any permanently useful influence on the vital actions. Unlike nature's restoratives of health—proper food—rest and sleep—it does not restore that expenditure of vital principle from which it so materially deducts. Its sole effect is stimulation. *Stimulation*, however, does not constitute *strength*; on the contrary, proportionate exhaustion necessarily ensues unless a requisite supply of nature's restoratives be in corresponding operation. Alcoholic liquors possess no such virtue. They stimulate, but do not impart permanent vigour or strength—they waste the stock of vital power—but have no influence to secure that physical condition which we denominate health. Nature, thus by her own wise and immutable laws, indicates the unfitness of all alcoholic drinks as articles of diet. The use of alcohol, according to this unerring test of its *dietetic* value, is found to be directly opposed to the *natural actions of the system*; because, like all medicinal agents, it can only be employed with beneficial results, when the system is in an *unnatural or unhealthy* state. "Nourishing substances," remarks a distinguished writer, "require to be of a similitude with the substances to be nourished; and the constituent materials of man, and the whole of living creation, contain no such compositions as those fermented and spirituous liquors. Such liquors, cannot therefore be reckoned useful, in the way of nourishing or maintaining the principal materials of the human frame." * "The whole history of spirit drinking," says Dr. J. Fothergill, "whether simple or combined with the different ingredients, existing in *fermented* or *brewed* liquors, affords abundant proof of its being uncongential with the most natural and healthy action of the bodily organs."

"Wines," remarks Dr. Darwin, "overheat without procuring strength, and cannot be *converted into good flesh, blood, or bone*."

This train of argument leads us to another important distinction between nutritious and ordinary articles of diet, and substances used for extraordinary or medical occasions. All medicinal articles exercise a specific or peculiar influence on the human frame. It is a law of universal application that the constant use of medicines tends materially, and if long continued, altogether to deprive them of their peculiar influence or virtues. Hence, to produce an equivalent effect, in many, if not most instances, a progressive increase must take place in the *amount* first administered. This law is familiar to medical

men, who habitually and necessarily carry it into operation in the practice of their profession. Such, precisely, are the effects produced by the use of tobacco, alcoholic liquors, and other medicines of a similar description. When habitually employed they lose their peculiar medicinal virtues; and, in fact, cease to produce their legitimate influence, unless given in doses directly destructive to health, or even to life itself. The *remedy*, in short, is worse than the *disease*. Innumerable examples of this position are constantly brought under the notice of medical men, and form a prolific source of professional emolument.

The universal tendency of intoxicating liquor is to debilitate the intellectual, and to deprave the moral, powers. The habitual use of alcohol, in any of its varied combinations, *strengthens the power of motives to do wrong, and weakens the power of motives to do right*. The nature as well as tendency of strong drink is such, that mankind in general cannot continue long to indulge in its *moderate* use. From the earliest period of its introduction to the present time, these evidences of its nature and character have been uniform and certain.

V. These general characteristics of alcoholic liquors lead to the examination of an important distinction, which exists between *intemperance* and *drunkenness*, terms in general used synonymously without reference to a primary or natural signification. The indications of drunkenness are too obvious to require description. One of the Canons of the Anglo-Saxon church, in a prohibition against drunkenness, thus defines the term:—"This is drunkenness, when the state of the mind is changed, the tongue stammers, the eyes are disturbed, the head is giddy, the belly is swelled, and pain follows." Intemperance, however, has relation to an essentially different state of the system. An individual may, in the strictest sense of the word, be habitually *intemperate*, without exhibiting either the staggering gait, the faltering tongue, or the disgusting ejaculations of the drunkard. In this circumstance lies the *insidious influence of strong drink*, which has ever been characterized by the unnatural changes which it effects, in too many instances, unobserved and unsuspected by its unfortunate victims.

Some writers contend that a person is not to be considered a drunkard, because he consumes a certain portion of liquor; but because what he does consume produces certain effects upon his system. Too often, however, free livers, who come under this description, imagine themselves strictly temperate, while, with apparent impunity, they daily indulge in strong drink to that extent which in others would produce gross inebriation. On calm consideration we should scarcely determine to denominate this class of persons *temperate* drinkers. An individual may be free from the charge of *drunkenness*,

* Lecture on Fermented Liquors, by Sir A. Carlisle, M.D.

and yet not be in the strict sense of the word *in a sober state of mind*—that is in a state which results from *strict adherence to a diet suitable to the requirements of nature*. This view of the subject corresponds with the fact, that intoxicating liquors, even when used in moderate quantities, produce both on the mind and on the body effects quite at variance with the rules of legitimate temperance. *Their invariable effect is to accelerate the action of the heart and blood vessels beyond their natural and healthy condition*. The temperance of nature consists in the correct and proper fulfilment of nature's laws; alcoholic stimulants unnaturally excite both the mental and physical powers, and create actions and sympathies, *sui generis*, more powerful in their effects than those which they necessarily displace, which in time strengthen into habit, or rather subside into disease. The progressive series of actions which constitute the inebriate appetite, are in themselves but successive inroads or stages of disease, which ultimately change the entire constitution, bodily and mental, of its unfortunate victims.

It is obvious from these remarks that individuals cannot be considered *temperate*, who, *in a state of health*, continue, however moderately, yet habitually, to indulge in drinks which experience and science equally condemn, as under all ordinary circumstances inimical to the human constitution.

The most accurate test of this interesting subject, perhaps, will be found in the writings and experience of medical men. The members of the medical profession, however, as a general rule, have not as yet sufficiently investigated this subject; there is no doubt indeed that they have participated, to a considerable degree, in the opinions and prejudices of the age. Some brilliant exceptions, however, present themselves to our notice, and happily for mankind, the attention of these *guardians of the public health*, has, of late years, been more directed to a subject so intimately connected with the moral and social, as well as physical, condition of mankind. The writer, as regards his own experience, does not hesitate to state, that an incalculable amount of physical injury arises from the moderate use of intoxicating liquors; and this to an extent little contemplated by the grand bulk even of medical men, much less by the non-professional portion of the community. It is of paramount importance, in this age of moderate drinking, to ascertain the consequences which arise from the *incipient morbid* influence of alcohol.

The experience of the writer induces him to believe, that as regards the amount of physical injury or disease which arises from the use of intoxicating liquors, by far the greatest proportion originates directly or indirectly in *moderate indulgence*. The evil effects of moderate indulgence in alcoholic liquors are not commonly obvious to superficial observers,

and in general are attributed to other and less remote causes. In this circumstance, however, consists the danger of this insidious habit, inasmuch as persons innocently indulge in a practice which progressively strengthens in its growth, until eventually it effects permanent and incurable changes in some part or parts of the constitution.

VI. The following miscellaneous illustrations are extracted from the writings of some of the most eminent members of the medical profession:—

Dr. Macnish.—"Men indulge habitually, day by day, not perhaps to the extent of producing any evident effect, either upon the body or mind at the time, and fancy themselves all the while strictly temperate, while they are, in reality, undermining their constitution by slow degrees,—killing themselves by inches, and shortening their existence several years."—*Anatomy of Drunkenness*, 5th Ed. p. 254.

Dr. Beecher, of America, remarks, "*and I fully concur with him*," observes *Dr. Macnish*, "It is a matter of unwonted certainty, that habitual tippling is worse than periodical drunkenness. The poor Indian, who once a month drinks himself *dead*, all but simple breathing, will outlive for years, the man who, drinks little and often, and is not perhaps suspected of intemperance."

Dr. Copland.—"There can be no doubt, that as expressed by the late *Dr. Gregory*, an occasional excess, is upon the whole, less injurious to the constitution, than the practice of daily taking a moderate quantity of any fermented liquor or spirit."—*Dict. of Pract. Med.* 1835, p. 685.

Dr. James Johnson.—"No one will dispute the bad effects of intoxication. But a very considerable proportion of the middling and higher classes of life, as well as the lower, commit serious depredations on their constitutions, when they believe themselves to be sober citizens, and really abhor debauch. This is by drinking ale or other malt liquors to a degree far short of intoxication indeed, yet from long habit producing a train of effects that embitter the ulterior periods of existence."—*A Treatise on Derangements of the Liver, Internal Organs, and Nervous System*, by James Johnson, M.D., *Editor of the Medico-Chirurgical Review*, &c., &c., Sect. Drink.

Dr. Foster, late physician to the British Fleet, states it as his conviction, "that these liquors, in all their forms and however used, are the most productive of the causes of disease with which we are acquainted."

Dr. Ramsey, Charleston, U.S.—"Health is much injured by those who are frequently *sipping* strong liquors, though they are *never intoxicated*. It is a good general rule never to drink anything but water."

Dr. Harris, in an official report to the Secretary of the American Navy, states that "the moderate use of spirituous liquors has destroyed many who were never drunk."

Dr. Rush.—"I have known many persons destroyed by ardent spirits, who were never completely intoxicated during the whole course of their lives."

Dr. Lettsom.—"Nearly all the illness of my adult patients, and most of the cases of sudden deaths, are occasioned by the practice of taking a glass of spirits and water after dinner."

"The observation of twenty years, in this city (Dublin,) has convinced me, that, were ten young men, on their twenty-first birthday, to begin to drink one glass (equal to two ounces) of ardent spirits, or a pint of port wine or sherry, and were they to drink this supposed moderate quantity of strong liquor daily, the lives of eight out of the ten would be abridged by twelve or fifteen years. They represent themselves as temperate—very temperate."—*Statement by Dr. Cheyne, late Physician General of Ireland, p. 54, 1829.*

Dr. Beddoes, author of the *Hygeia* and other valuable works, says, "That every man will become a valetudinarian, more or less miserable, if he drink daily a quarter of a pint, or half a pint of port wine (equivalent to an ounce, or two ounces of pure spirit) from his sixteenth year, is to the full as probable as that he shall have a dangerous disease if he come within the reach of the effluvia."

Dr. Cadogan asserts, in opposition to those who advocate a little wine every day, that whatever they may advance in favour of the practice, they are undoubtedly in a very great error, and that it would be much better and safer to drink a bottle now and then, and at other times to drink water, or small beer only. In the interval, nature might subdue the effects of the wine and recover from its influence. — *Cadogan's Dissertation on the Gout, 6th Ed. p. 61.*

Dr. Macrorie, Physician to the Fever Hospital, Liverpool.—"After having treated more than three thousand cases, in the town hospital, Liverpool, I give it as my decided opinion, that the constant moderate use of stimulating drink, is more injurious than the now and then excessive indulgence in them."

Dr. John James, of America.—"The moderate use of intoxicating liquor, undermines the constitution without exciting the suspicion of the victim, until reformation is all but hopeless. No quantity of spirituous liquors, however small, can with safety be taken daily, much less several times a day with impunity."

Dr. Garnett.—"Those who drink only a moderate quantity of wine, so as to make them cheerful, as they call it, but not absolutely to intoxicate, may imagine that it will do them no harm. The strong and robust may enjoy the pleasures of the bottle and the table with seeming impunity; and sometimes for many years may not find any bad effects from them; but depend

upon it, if a full diet of animal food be every day indulged in with only a moderate portion of wine, its baneful influence will blast the vigour of the strongest constitution."—*Dr. Garnett's Lecture on Health, 2nd Ed. 1800.*

Dr. Gordon.—"When I was studying at Edinburgh, I had occasion to open a great many bodies of persons who had died of various diseases, in a population much more renowned for sobriety and temperance than that of London, but the remarkable fact was, that in all these cases there was more or less some affection of the liver; and I account for it, from the fact, that these moral and religious people were in the habit of drinking a small quantity of spirits every day, say one or two glasses. They were not in any shape or form intemperate, and would have been shocked at the imputation. I had subsequently the opportunity of confirming my observation in the West Indies, where the practice prevails of taking small quantities of spirits, not at all amounting to intoxication, but in all these cases there was more or less, some affection of the liver."—*Parl. Rep. on Drunkenness, p. 196.*

John Harrison Curtis, Author of *Observations on the Preservation of Health, in Infancy, Youth, Manhood, and Age, &c.*—"It is the almost unanimous opinion of physiologists, that, to a person in a state of health, fermented liquors are decidedly injurious; their effect is directly upon the nervous system and the circulation, which they stimulate and quicken. Now, in a state of health, the nervous system is duly balanced, neither too active nor depressed; and the circulation is of the kind best adapted for carrying on the processes of waste and nutrition. Whatever then tends, in however slight a degree, to disturb this condition of the system, is, *pro tanto*, a cause of disease: not the less a cause of disease because its effects may for a time be imperceptible, or because it may temporarily enliven the mind, and fill it with pleasing emotions. But fermented liquors (well are they denominated intoxicating or poisoning!) are hurtful, not merely by deranging function, they inflict terrible organic injuries, which, if the bad habits be persisted in, become permanent."

Charles A. Lee, M.D., A.M.—"My own experience, as well as observation, fully satisfies me that the moderate use, so called, of alcoholic drinks, tends directly to debilitate the digestive organs, to cloud the understanding, weaken the memory, unfix the attention, and confuse all the mental operations, besides inducing a host of nervous maladies."

Rev. Edward Hitchcock, Professor of Chemistry and Natural History, Amherst College, America.—"The use of alcohol and tobacco tends powerfully to debilitate the constitution; and the complaints, which they generate, descend hereditarily to posterity. Nor are these effects confined to

the offspring of the habitually intemperate. These poisons, still regarded by multitudes as the *elixir vitæ*, are working a slow, but fatal, deterioration in the constitutions of thousands, who would resent the charge of intemperance with indignation; so that the influence has become truly national; nor is it among the feeblest of those causes, that are hurrying us fast away from the simplicity, purity, and the physical and intellectual energy, of our pilgrim fathers."

The following most valuable testimony on this subject was drawn up by JULIUS JEFFREYS, Esq., F.R.S., an eminent medical practitioner, now resident in England, but located many years in India. As will be seen, a great number of distinguished medical men have added their signatures to the document:—

"An opinion, handed down from rude and ignorant times, and imbibed by Englishmen from their youth, has become very general, that the habitual use of some portion of alcoholic drink, as of wine, beer, or spirit, is beneficial to health, and even necessary for those subjected to habitual labour.

"Anatomy, physiology, and the experience of all ages and countries, when properly examined, must satisfy every mind, well informed in Medical science, that the above opinion is altogether erroneous. Man, in ordinary health, like other animals, requires not any such stimulants, and cannot be benefitted by the *habitual* employment of any quantity of them, large or small; nor will their use during his life-time increase the aggregate amount of his labour. In whatever quantity they are employed, they will rather tend to diminish it.

"When he is in a state of temporary debility from illness, or other causes, a temporary use of them, as of other stimulant medicines, may be desirable; but as soon as he is raised to his natural standard of health, a continuance of their use can do no good to him, even in the most moderate quantities, while larger quantities (yet such as by many persons are thought moderate) do, sooner or later, prove injurious to the human constitution, without any exceptions.

"It is my opinion, that the above statement is substantially correct."

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VII. Eminent writers advance various definitions of the nature and meaning of temperance. Some correctly assert, that an intemperate man is one whose appetite rules his reason; and that a temperate man, is one whose reason rules his appetite. Temperance is a virtue of self-denial or restraint. Dr. Adam Clarke defines it to be a *proper* and limited use of all earthly enjoyments, keeping every sense under proper restraint, and not permitting the animal part to subjugate the rational. Parkhurst renders the word "*self-government, temperance, continence*; having power over one's own appetites." Pasor and other lexicographers, give it a similar signification. In this sense also, was the word used by one of the most distinguished philosophers of old. "Temperance," observes Cicero, "is the unyielding control of reason over lust, and over all wrong tendencies of the mind. *Frugality* is not so extensive as temperance. Temperance means not only frugality, but also modesty and self-government. It means, abstinence from all things not good, and entire innocence of character." *Temperance* is that which teaches us to regulate our desires and fears, so that in *desiring* and in *shunning* things, we may always follow reason. Fortitude is concerned in labours and dangers, *temperance in renouncing pleasures*.

The word *temperance* is derived from the latin *tempero*, which not only signifies to "*use moderation*," but "*to abstain*" and "*to refrain*." The latter significations, indeed in most of the Lexicons, are found to precede the former. The Greek *ἐγκρατής*, *enkrate*s, corresponds with the Latin *temperantia*, and the English *temperance*. A passage in Xenophon well defines the nature and character of the temperate man, *ἐγκρατής δὲ, ὥστε μεδέποτε προαιρείσθαι το ἥδιον ἀντι του βελτίονος*. Xen. 4, 8, 11, *but he is ἐγκρατής, enkrate*s, *who on no occasion whatsoever prefers what is merely agreeable to what is best*. Temperance is a virtue of distinction, and in its application requires the strict exercise of reason and discrimination. *Moderate* indulgence in some articles may with propriety be entitled *temperance*, while in others *total abstinence* is essential to the strict fulfilment of nature's laws and dictates.

We may with great propriety conclude, that physical temperance consists in the moderate use of those things which are nutritious and proper for human sustenance, and in abstinence from everything which is injurious and unnecessary. This definition, is, in every sense of the word, strictly applicable, because it not only comprehends the *quantity* but the *quality* also of those

things which ought to enter into the composition of human diet. Sir William Temple, a writer of considerable eminence of the seventeenth century, remarks thus:—"I do not allow the pretence of temperance to all such as are seldom or never drunk or fall into surfeits, for men may lose their health without losing their senses, and be intemperate every day without being drunk perhaps once in their lives; but that which I call temperance, is a regular and simple diet, limited by every man's experience of his own easy digestion, and thereby proportioning, as near as well can be, the daily repairs to the daily decays of our wasting bodies."* Sir William Temple then proceeds to apply this rule of temperance to the removal of a disease on which he has written largely, and enforces the necessity of rigorous abstinence from inebriating liquor on all ordinary occasions.

Another writer, about the middle part of the seventeenth century, in reprobating the practice of intemperance, makes the following pertinent remarks:—"It is sad to consider how many will hear this charge, for one that will apply it to himself, for confident I am, that fifteen of twenty, this city over, (London) are *drunkards*, yea, *seducing drunkards*, in the dialect of scripture, and by the law of God, which extends to the heart and the affections." "Perhaps," observes the same writer, "by the law of the land, a man is not taken for drunk except his eyes stare, his tongue stutler, his legs stagger; but by God's law, he is one that goes often to the drink, or that tarries long at it. Prov. xxiii. 30, 31. He that will be drawn to drink when he hath neither *need of it*, nor *mind to it*, to the spending of *money*, wasting of *precious time*, discredit of the *Gospel*, the stumbling-block of *weak ones*, and hardening associates. Briefly, he that drinks for *lust*, or *pride*, or *covetousness*, or *fear*, or *good fellowship*, or to *drive away time*, or to *still conscience*, is a *DRUNKARD*."†

VIII. Gluttony is a crime equally to be reprobated with drunkenness. The advocates of Temperance Societies, exclaim some objectors, might with equal justice declaim against the moderate use of food, as against the moderate use of alcoholic liquors. "No valid reason," says a recent writer, "can be produced against the use of a jug of wine any more than against making a hearty meal on roast beef. Each admits equally of abuse."‡ There exists, however, in this respect, a broad and palpable distinction. Gluttony consists in the *ABUSE of good and*

nutritious food; moderate indulgence in inebriating compounds in the *USE of substances neither possessed of nutriment* nor capable of promoting the healthy actions of the human frame. The difference indeed, consists on the one part in the *ABUSE of a good*, and on the other, in the *USE of a bad thing*. The continuance of our existence requires the moderate and proper use of the one—the other, to persons in health, is never beneficial in its effects, but always opposed to, if not destructive of, nature's laws and operations.

The powerful influence which intoxicating liquors exercise on the human system, their strong tendency to lead to excess, their effects in inflaming the passions and enervating the mind, are sufficient indications, that even their *moderate and habitual* use is incompatible with a *temperate and healthful* condition of either body or mind.

IX. The vice of intemperance, during every stage of its progress, has been characterized by some prominent and peculiar features.

1. *The use of intoxicating liquors is an acquired habit.* The influence which inebriating compounds exercise over the mental and physical constitution of man, is altogether the result of *artificial feelings and impressions, superinduced on those with which the system is naturally endowed.*

Providence, in wisdom and bounty, has supplied the wants of man in rich profusion. Animal and vegetable creation, well stored with aliment, surround him on every side. Each substance, moreover, bears characteristic evidence of the design of its munificent Creator. The vast variety of vegetables and their fruits, which enter so largely into the diet of the human race, present evident relation between the nature of their composition, and the purpose to which they are designed to be appropriated. This observation applies with equal force to water, one of the most useful substances in nature.

Alcohol, in all its combinations, is devoid of these nutritious characteristics. It is, on the contrary, inimical to the healthy functions of the animal economy, and productive only of that injurious excitement, which subsides into morbid debility.

It is a humiliating reflection, that man is the only animal in creation accustomed to use intoxicating liquors. No analogous substances are found in the whole range of animate creation. Alcoholic stimulants are purely the results of human ingenuity and invention, called into operation by the desire to gratify a sensual and sinful propensity. Mankind have thus *themselves* originated an evil, which has proved the severest moral and physical scourge that ever afflicted the human race. Pliny might well exclaim:—*Vitio damus homini quod, soli animalium, non sitientes, bibimus*—it is a vice peculiar to man that he alone, of all animals, drinks when he is not thirsty.

Several prominent and striking facts are

* An Essay on the Cure of the Gout.—*Miscellanea*, Part I. 1677.

† "The Blemish of Government, the Shame of Religion, the Disgrace of Mankind, or a charge drawn up against Drunkards and presented to his highness the LORD PROTECTOR, in the name of all the sober party in the three nations," &c., &c., by R. Younge. London, 1658.

‡ Penny Magazine, 1835, p. 236.

adduced in the present place, to prove that the habit of vinous indulgence is altogether acquired.

Entire nations are known to have existed for ages in a state of comparatively superior health, comfort, and happiness, without the aid of intoxicating liquors. Mr. Buckingham states it to be his conviction, "judging from what he himself has seen, and heard on the testimony of creditable writers, that one-fifth of the entire population of the globe are abstainers from all intoxicating liquors." "A number," he remarks, "sufficiently large to show that they are not necessary to human existence, health, or enjoyment." When first offered to the inhabitants of such countries, they evince considerable aversion to their use; and are reconciled to the practice, only by a conformity to the habits and persuasions of those civilized nations who seduce them into the destructive vice of intoxication.

Princee Le Boo, a native of the Pelew Islands, when on his way to England, on his arrival at Macao, witnessed one of the seamen in a state of gross intoxication. This uncivilized child of nature evidently supposed the man to be ill, and expressed much concern at his state, requesting the surgeon of the vessel to visit him and afford him every requisite assistance. The Princee was told that nothing material ailed the man, and that he would soon be well, as it was the effect only of indulgence in liquor, a habit common to the sailors. The alarm of Lee Boo was removed by this statement, but they could never afterwards, on any occasion, prevail upon him even to taste spirituous liquors.

Captain Beekman relates the following instructive anecdote. The natives of Borneo, it appears from their temperate habits, have rarely occasion to use medicine, much less to resort to the operation of bleeding, which to them is a circumstance of no trifling alarm. One day, being unwell, he ordered the surgeon to bleed him. Cay Deponalte, one of the natives, in company with others of his countrymen who were present, strangers to the operation, evinced great amazement at the affair. When they witnessed the blood gush out, they were so frightened that they immediately ran out of the room, crying aloud, "Oran, gela atte;" that is, the man's heart or mind is foolish. After this event, the natives told him that they let out their lives and souls willingly. To this remark Captain Beckman replied that their diet being *very plain*, and their drink only *water*, they had no occasion for bleeding, but *we*, said he, who drink so much *wine* and *punch*, and feed upon flesh, which all render the blood hot and rich, are absolutely obliged to resort to this operation to *prevent illness*. Cay Deponalte made this sensible reply, "I think that shows you to be *still greater fools*, in putting yourselves to such expensive charges on purpose to receive pain for it."

A corresponding illustration of these statements, may be found in the fact, that young persons, and in particular children, almost universally exhibit signs of repugnance, when first induced to taste of any kind of intoxicating liquor; which indications of disgust are not manifested, when they partake of the almost unlimited varieties of nutritious food.

The unnatural excitement which these liquors induce when first used produces unpleasant sensations on the unvitiated palates of the young. The benevolent Creator has, in his wisdom, so arranged the constitution of man, that every article of a nutritious character is calculated to afford agreeable sensations of pleasure and refreshment to the temperate consumer. The excitement produced by alcoholic stimulus, however, becomes agreeable only when the system has, for some time, been habituated to its use; and, in fact, not until a series of artificial feelings have been created, which require for their continuance the repeated application of the stimulating agency by which they were first produced.

The varied sensations which inebriating compounds impart to the *taste*, furnish an additional proof that the habit of indulgence in their use is altogether acquired. The *taste* and *flavour* of these compounds have varied, to a considerable extent, in almost every age of the world. The nausea and disagreeable sensations which most of them impart, require, in the first instance, to be conquered or rendered familiar by continued use, before a vitiated appetite can relish their reception. The Jews, for example, frequently mixed frankincense and various spices with their wines, in order to render them either fragrant, or more powerful in their effects. The Romans and Greeks made plentiful use of pitch, turpentine, resin, and other potent ingredients for the same purpose. Malt liquors were formerly prepared without the bitter addition of hops; in the present day, however, *habit* has rendered that celebrated bitter so familiar to the taste, that it is on all occasions employed in the preparation of beer and ale. The various kinds of malt liquors now in common use in England are forcible illustrations of the same fact; almost each district having its ale or beer more or less celebrated *for some peculiar flavour or reputed strength*. Long continued use renders these various compounds highly agreeable; physical disorder, indeed, is not unfrequently induced, even by occasional indulgence in another variety of the same liquor. The system habituated to one peculiar kind of inebriating liquor, rejects, with natural repugnance, stimulants possessing different properties, both in regard to their strength and flavour.

This diversity of character, more or less, applies to inebriating liquors in every part of the globe in which they are used; each nation possesses its favourite liquor, to which

its inhabitants have become attached, and the use of which they cannot abandon without feelings of painful deprivation. All of these, however nauseous at first, become not only agreeable, but are eventually considered as necessary to healthful existence. Such is the influence of habit. "Most persons," remarks Dr. Garnett, "have so indulged themselves in the pernicious habit of drinking wine, that they imagine they cannot live without a little every day; they think that their very existence depends upon it, and that their stomachs require it to enable them to perform the necessary functions of digestion. Similar arguments may be brought in favour of every other bad habit, though, at first, the violence we do to nature, makes her revolt; in a little time she submits, and is not only reconciled, but grows fond of the habit, and we think it necessary to our existence. Neither the flavour of wine, of opium, of snuff, nor that of tobacco, is naturally agreeable to us: on the contrary, these articles are highly unpleasant at first; but, by the force of habit, they become pleasant. It is, however, the business of rational beings to distinguish carefully, between the real wants of nature, and the artificial calls of habit; and when we find that the last begin to injure us, we ought to use the most persevering efforts to break the enchantment of bad customs; and though it may cost us some uneasy sensations at first, we must learn to bear them patiently; a little time will reward us for our forbearance by a re-establishment of health and spirit."

Historical facts present strong proof of the use of intoxicating liquors being an acquired bad habit, in a national point of view. Most of the tribes of antiquity were unaccustomed to drink wine in the earlier and more prosperous periods of their existence. The Persians, the Greeks, the Carthaginians, and the Romans are examples in point. Antoninus Pius, remarks an old writer, on "voracitie and immoderate drinking," in the quaint language of his day, "commanded that none should presume to sell wine, but in Apothecaries' shops, for the sick or diseased." It would have been well for the interests of mankind had this wise and salutary enactment been enforced up to the present period. The Zephyrii, a people of Locris, as the laws of Zaleucus testify, punished with death those who drank wine unmixed, except by order of a physician, and prescribed for the benefit of his health. Boethius informs us that the enactments of the ancient Scots were no less severe in their character. In England, the use of wine and spirits has been in exact proportion with indulgence in luxurious habits and sensual gratifications. Tryon, who wrote A. D. 1683, informs us that in this country, in former times, Canary wine was chiefly sold by the Apothecaries. "Where," says this writer, "there was one quart of wine drunk forty or fifty years ago, there is now ten thousand."

"The use of tobacco and brandy," he further remarks, "a hundred years since was hardly known. Nay, the use of our ale and beer has hardly been above 200 years, which now we account most natural. Great hath been the increase of those foreign ingredients of late years, insomuch that they are esteemed good to be mixed amongst common food and drinks, as also to be taken *physically*."* [That is, *as physic*.] Ardent spirits, for a considerable period after their invention were confined to the Apothecaries' shop, and used only as medicines. In the present day, however, these deleterious compounds are become familiar and habitual articles of refreshment. Sir W. Douglas, in a work printed at Boston, 1755, remarks: "Spirits, (*spiritus ardent*) not above a century ago, were used only as official cordials, but now are become an endemical plague, being a pernicious ingredient in most of our beverages." These observations apply, with equal force, to the habitual use of other medicinal articles,—the nature and effects of which render them altogether unfit for use to persons in a state of health, and consequently productive sources of bodily and mental disturbance. "You may hear many say," observes old Tryon, "that *tobacco* is good to prevent *fumes* and *vapours* from flying into the head, and so make it their constant practice to take it. Now, if this had any such operation, as they say, the constant use of it would destroy its virtues; the same may be alleged of *brandy*, *wine*, and *spices*."† This sensible writer in another place, states "It is not above sixty or seventy years ago since, that only *gentlemen*, and but a few of those took *tobacco*, and then so moderately that one pipe would serve four or five, for they handed it from one to another; but now every plowman has his pipe to himself."‡ The use of opium in this country forms another, and more recent, as well as instructive example. This potent narcotic drug remains no longer an article of purely medicinal use. Thousands,—and it is to be feared, tens of thousands—of our fellow-creatures employ opium as most persons make use of tobacco, that is, as a means of sensual gratification, and unless information be spread as to its injurious qualities and effects, we may anticipate an extension of its use in European nations equal to that which has long obtained among the inhabitants of Asia. These and other similar illustrations which might be adduced, exhibit the influence of habit and circumstances over our character and lives, and strongly enforce, as an important object in the education of our youth, the proper direction and control of the appetites. Experience testifies that legislative enactments are trifling in importance when compared

* Tryon's Way to Health, Long Life, and Happiness, p. 220, 1683

† Ibid, p. 220.

‡ Ibid, p. 168.

with early and sound moral and religious instruction.

2. *Habitual and long continued indulgence in the use of inebriating drinks, obtains an almost irresistible influence over both the mental and physical constitution of man.*

This change appears to be peculiar in its character, impairing the moral perception, enervating the mind, and deranging all the operations of the physical powers; substituting an artificial and tyrannical condition, in the place of the harmonious and agreeable operations of nature. This condition is so enslaving in its character, that individuals have been known to make the most severe sacrifices, rather than submit to be deprived of the means of sensual gratification. The victims of strong drink indeed, often declare their utter inability to resist its influence,—so strong and so painful are the cravings of the intemperate appetite.

It is important to observe, that this peculiar fascination is found to exist, even when the mind is perfectly conscious of the guilt and awful consequences, temporal and spiritual, which inevitably result from perseverance in intemperate habits. The entreaties of friends and relations, the loss of character, the privation of all temporal prosperity, and the positive knowledge of eternal punishment,—all such inducements, however powerful in themselves, are often found insufficient to arrest the drunkard in his self-destroying career. Dr. Cheyne, of Dublin, relates a remarkable example of the inveteracy of this evil habit. A gentleman, very amiable in his disposition, and justly popular among the circle of his acquaintance, contracted habits of intemperance: his friends argued, implored, and remonstrated, but in vain. At last, he thus put an end to all importunity. A friend addressed him in the following strain:—"Dear Sir George; your family are in the utmost distress on account of this unfortunate habit; they perceive that your business is neglected, your moral influence is gone, your health is ruined, and, depend upon it, the coats of your stomach will soon give way, and then a change will come too late." The poor victim, deeply convinced of the hopelessness of his case, replied thus: "My good friend, your remarks are indeed too true, but I can no longer resist temptation. If a bottle of brandy stood at one hand, and the pit of hell yawned on the other, and if I were convinced that I were to be pushed in, as surely as I took one more glass, I could not refrain; you are all very kind; I ought to be very grateful for so many kind good friends, but you may spare yourselves the trouble of trying to reform me,—the thing is now impossible."*

"An habitual drunkard, writes Dr. Rush, when strongly urged by one of his friends to

leave off drinking, said, "Were a keg of rum in one corner of a room, and were a cannon constantly discharging between me and it, I could not refrain from passing before that cannon in order to get at the rum."

The pages of history record numerous examples of similar infatuation. Ælian informs us that Dionysius the younger, would sometimes continue for many successive days in a state of gross intoxication, a habit, the frequent recurrence of which reduced him at last almost to total blindness.* The Emperor Zeno daily drank himself into a state of insensibility. In one of these fits of inebriety, his consort, Ariadne, had him committed to the horrors of the tomb. Returning consciousness revealed the dreadful situation in which he had been placed by his folly and imprudence. His lamentable cries and entreaties, however, were suffered to pass unheeded, and the sensual tyrant, detested alike by his wife and his subjects, was thus left to die a miserable death.

The conduct of Wenceslaus, King of Bohemia, exhibits another instance of the infatuating influence of strong drink. This monarch visited Charles VI. at Rheims, A.D. 1397, in order to treat with him on some important national affairs. The wine of that country afforded him such unexpected pleasure, that on one occasion, rather than be diverted from the excess in which he daily indulged, he consented to make certain important and disadvantageous concessions.†

One of the monarchs of Bamba, in Africa, resigned his right to the throne, rather than submit to be removed from the Portuguese settlements, where he had ample opportunities of indulging his fondness for intoxicating liquors.‡

Shane O'Neil, the famous opponent of Queen Elizabeth, usually kept in his cellar at Dundrum, 200 tuns of wine, of which as well as of *Usquebaugh*, he drank to such excess that his attendants were accustomed to bury him in the earth chin-deep, until the inflaming effects of inebriation had become dissipated.||

The following evidence of the "*infatuating nature of the habit*," is the result of an extended experience of Mr. Poynder, late Under-Sheriff of Middlesex, London.—"I have observed that when it has once taken possession of the mind and body, it is next to a miracle if it yields to any sense of shame, or any fear of loss. The power with which it retains its hold is really wonderful. A man shall see his property wasting, his health declining, his character departing from him, and all in vain; he shall even form the most solemn resolutions of amend-

* Ælian, Var. Hist. Cap. 6.

† Journ. de Scav. June, 1706.

‡ Adamson's Voyage to Senegal.

|| Hollinshed's Chronicles. Vol. vi. page 331.

* A Statement of Certain Effects of Temperance Societies, 1829, p. 8.

ment to no purpose, and admit the force and truth of every remonstrance made by his relatives and friends, without being able to abandon the habit; he knows that poison is in his cup, and yet he will drink on. I have known repeated instances of this fact, and so I believe has almost every one else. It is no uncommon case for drinkers, when admonished by those whom they esteem, to weep over their own folly; such instances I have myself seen again and again; but how few are the instances where resolutions of amendment do not vanish with such tears! It is perhaps the most fatal circumstance connected with this habit, that it enervates and debases the mind so as to deprive it of its natural vigour, and prevent the success of every effort for its own deliverance. I knew a case in which the preservation of an office of much importance to the possessor, depended upon the abandonment of the habit of spirit drinking; this person who was much respected by a great number of his superiors, was treated by them with all possible lenity for some years, and every effort was made in the interim to reclaim him from his folly; he always received these attempts with the greatest gratitude, but could not give up his vice, and it was found at last impossible to continue him in his place: his health followed the loss of substance, and his life of both. This is no solitary case."

A recent writer tells us of an instance of infatuation, which occurred among the Circassians, and was produced by the use of *Rakee*, for the love of which the individual "sold and sacrificed not only all his worldly possessions, to his very shirt, but even his flesh and blood, his last offering at the shrine of the jolly God, being his wife and his children, whom he disposed of in like manner."*

A volume might be filled with similar examples. Innumerable instances in point are of ordinary occurrence at the present period, all of which exhibit the fatally fascinating influence of depraved appetite and the power which it possesses to overcome every motive either of a moral or of a religious character.

3. *Intemperance is not confined to climate.* The inhabitants of northern climes are, on examination, found to be equally prone to intemperance with the natives of warmer latitudes. Climate cannot therefore in itself be considered as a *cause* of drunkenness. It has, however, considerable influence in resisting or favouring the effects of intoxication. The natives of cold countries will indulge with comparative impunity in that *amount* of stimulating liquor, which, in warmer temperatures, would be productive of fatal consequences. It must not thence, however, be supposed that indulgence in alcoholic liquors in cold climates is not

attended with evil results. In Russia and in Sweden the free use of ardent spirits is well known to occasion an appalling degree of mortality.*

The existence of intemperance in one portion of the globe more than another has been remarked by Montesquieu. "Go," says he, "from the equator to our pole, and you will find drunkenness increasing, together with the degree of latitude. Go from the same equator to the opposite pole, and you will find drunkenness travelling south, as on this side it travels towards the north." Dr. Macnish, in his *Anatomy of Drunkenness*, affirms that there cannot be a doubt that drunkenness prevails to a much greater extent in northern than in southern latitudes; and immediately afterwards adds, "the nature of the climate renders this inevitable, and gives to the human frame its capabilities of withstanding liquor."†

The nature of climate, we may remark, does not interfere so much with the disposition or proneness of mankind for stimulating liquors, which appears to exhibit the same character in every portion of the globe; but the effects noticed by this writer must be ascribed to the *physical capabilities* or power of resisting foreign influences which varies in the human constitution under different climates. Hence, remarks Dr. Macnish, a quantity which scarcely ruffles the frozen current of a Norwegian's blood, would scatter madness and fever into the brain of the Hindoo. Even in Europe, observes the same writer, the inhabitants of the south are far less adapted to sustain intoxicating agents than those of the north.‡

Physical causes account for the fact, that drunkenness prevails more in cold latitudes than in warm. The inhabitants of warm climates appear in their cheerful and volatile disposition, to be inspired by the exhilarating influence of warmth. The influence of heat on the animal functions is known to all. The natives of frozen regions seek by artificial stimulants to supply those agreeable impressions, which their climate in some respects denies them. Recourse unfortunately is had to the stimulus of strong drink.

A medical writer expresses himself on this subject in the following erroneous manner. "The great estimation," he asserts, "in which spirituous liquors are held by all northern nations, is a sure proof of their necessity and value. Among these a perpetual struggle between the laws of life *within*, and the laws of nature *without*, exists; and, whatever will give a preponderance to the former, will of course, be eagerly sought after. The further we approach to the north, the greater devotedness we find to these liquors. When life

* Longworth's Year among the Circassians.

* Chapter v.

† *Anatomy of Drunkenness*, p. 16.

‡ *Ibid* p. 17.

and nature are at a low ebb, artificial excitements become indispensable; and the means of obtaining these will be among the chief objects of the people.* The existence of a stronger propensity for stimulating ingredients in one part of the world more than another, is not surely a sufficient proof of their value and necessity. The statement, moreover, of Dr. Sheer, is found to be directly opposed to the *known laws of the animal economy*. The system of man is wisely constituted by a beneficent Creator, with such capabilities as enable him not only to endure the vicissitudes of climate, but, when requisite, to sustain extraordinary exertion of the animal strength without serious injury, though supported only by the most simple kinds of nutriment. Alcoholic stimulants in all climates, and under every ordinary circumstance, invariably diminish this capability, by injuring and wasting the vital powers of the human frame. Hence stimulating liquors in cold climates ought to be avoided, because they do not add to the *natural strength* of the system, but deprive it more or less of that vital energy with which it has been endowed to enable it to resist *external influences*. A proper supply of nourishing food and appropriate clothing, is all that is requisite for this purpose. The *quality* and *quantity* of nutriment, however, necessary for the support of the animal frame, is affected, to a considerable extent, by climate, as may be rendered sufficiently evident by the change which is felt in our own country, during the seasons of winter and summer. The heat of summer diminishes the appetite for that stimulating kind of food, which appears in some degree necessary during the rigorous effects of colder seasons. Hence the necessity of dietetic caution. The same result is found to occur in the various latitudes to which reference has been previously made. The Creator has, however, everywhere placed within the reach of man, such natural food as is requisite, and best adapted to the situation and climate in which he is located. All other indulgence is the result of unlawful gratification and depraved appetite, and cannot be attributed to necessary and inevitable circumstances, over which he has no control.

Facts contravene all theories respecting the geographical propensity to drunkenness. In regions within the equator in one hemisphere, a strong desire exists for indulgence in unlawful excitement; while in another hemisphere, the frozen regions for example, the same injurious propensity exhibits itself in no less vigorous characters. The natives of Otaheite and the Sandwich Islands, vast myriads of inhabitants in Mohammedan India, as well as the residents of the West Indies, each display inordinate attachment to inebriating liquors or drugs; while on

the other hand numerous tribes are known in cold regions, who entirely refrain from the use of strong drinks (or at least did so until their unfortunate intercourse with European nations) and indeed exhibit towards it, on all occasions, the most signal tokens of dislike. Parry, Barrow, Henderson, and Captain Cook, in their accounts of the Esquimaux, Icelanders, and natives of Terra del Fuego, fully bear out the latter statement; while a variety of authentic narrations present innumerable facts in evidence of the former.

4. *Intemperance is common to savage and to civilized nations, to the illiterate and the educated.* This vice exists almost in every nation, and among every people, whether belonging to the uncultivated savage, or to those individuals who enjoy the advantages of education and refinement.

The history of intemperance acquaints us with examples of the effect of strong drink on nations, eminent for intellectual qualifications, almost equally atrocious in their character with those which occur among the most barbarous nations on record. The *consequences* of intemperance, indeed, admit of few modifications. They are invariably degrading and unnatural in their character.

Some of the features of intemperance are considerably modified by education, in particular when combined with a certain amount of moral restraint. The untutored savage, restrained by no principles of shame or propriety, abandons himself to insatiate and unbounded excess. His views of earthly enjoyment extend little beyond the present moment: no sufficient motive, therefore, presents itself to oppose his unlimited desire for sensual gratification. Hence arise those horrible and disgusting scenes of bloodshed which so generally result from savage excess.

"A Turk," says a recent and intelligent traveller, "seldom drinks for any other purpose than to intoxicate himself. If he drinks at all he is a sot. Downright intoxication is his only idea of the pleasure of drinking. The same is true of the Persians. They have no idea of sipping wine sociably like Europeans. It is only when they are completely surrendered to its power, that they are contented."*

"It is not the pleasantness of the liquor," remarks Mr. Pinkerton, "but the actual wish of being intoxicated that leads to habitual excess; and in order to produce this effect, a Russian will swallow a glass of spirits of wine, or a savage a bottle of rum, with great pain to the palate."*

The same effects, though perhaps in different degrees of excess, will, on further examination, be found to attend the operations of intemperance, in more civilized portions of the globe. In proportion as the animal propensities of man preponderate

* Dr. Sheer on the Diseases of the Lower Orders in Dublin — *Dublin Hospital Reports* Vol. iii

* Tour in Turkey and Asia, by the Rev. Horatio Southgate.

† Pinkerton's Recollections of Paris. Vol. ii. p. 360.

over his moral and intellectual powers, will be found prevailing among the species, a greater or less amount of ferocious excitement and savage barbarity.

The drinking practices, however, of civilized nations, in some respects, differ materially from those of the unpolished and unguarded savage. The object of an intemperate member of the former class, is not how he can attain the readiest method of intoxication, but *how he can attain the highest degree of animal and pleasurable excitement, without the exhibition of any visible signs of what is commonly denominated intemperance.*

All classes agree to denounce the vice of *drunkenness*, as odious and disreputable. A more *captivating, insidious, and respectable* form of intemperance, however, prevails in the present day under the indefinite and dangerous designation of *moderate* drinking. It will easily be seen how impossible it is, on any sound or correct data, to define the *nature and limits* of *moderate* indulgence. In a physiological point of view, this is impossible. Long continued habit will enable one individual to endure, *without the least external symptom of intemperance*, such an amount of alcoholic stimulus as would render another person less inured to the intoxicating draught, in the popular sense of the word, completely *drunk* and even *insensible*. Hence persons may be *chargeable with intemperate excitement*, and *really* labour under the influence of a greater or less amount of it, and at the same time they may pass through the ordinary circumstances of life with a certain kind of credit and respectability, and even be looked upon as *temperate* members of society. But let it not, therefore, be supposed that the practice of moderate drinking is unattended with immoral and injurious effects. Experience demonstrates the contrary.

The moderate, but habitual, use of inebriating liquors heats the blood, inflames the passions, and renders the disposition susceptible of even slight provocation. It weakens, if it does not to a great degree destroy, the powers of reflection, deliberation and judgment; the relations of things are viewed through a coloured and distorted medium, and with these radical transitions there follows an utter impossibility to estimate the character of actions, with dispassionateness and discrimination. Aristotle observes, that man while in a sober state reasons with correctness, because he makes a proper use of his judgment; in a state of utter intoxication he does not reason at all; when, however, he is partially under the influence of wine, he reasons inaccurately and therefore readily falls into error and mischief. “Δια τι ο ακροθωραξ μαλλον παροινει του μεθυσοντος μαλλον και νηφοντος; Η οτι ο μεν νηφων, ευκρινει; ο δε πανταπασι μεθυσων, δια το τας αισθησεις επιπεπλασμενας ειναι, ου δυναμενος το βαρος φερειν, ου κρινει, ου κρινων δ', ου παροινει. Ο δ' ακροθωραξ κρινει τε, και, δια

τον οινον, κακως κρινει, ωστε παροινειν.” These remarks precisely correspond with universal experience. The mere animal drinker, as we have seen in the example of the savage, commits under the influence of *excessive* excitement horrible deeds of violence and bloodshed. The *moderate* excitement, however, produced by the drinking habits of refined society, is not much less dangerous and destructive, although, in general, its effects are overlooked, and not unfrequently attributed to other causes. The greater part of the broils which occur in civilized society, seldom take place when the individuals concerned are *in a state of visible intoxication*; but at a period when their animal and moral powers have been elevated to a pitch of—controllable excitement, and when credit is given them for having perfect command over their feelings and judgment. In this state the balance of reason is easily overthrown, and the whole force of subdued and accumulated excitement is brought to bear on the first favourable opportunity which may present itself for its full development and unrestrained operation. The records of domestic history bear melancholy evidence of this fact, so easy and natural is the transition “from cups to civil broils.” Pinkerton, in reference to that condition which in another place he denominates “moderate and genteel intoxication,” such he further states, as is “to be found in good company among men of respectability,” remarks thus: “Even the habit of a moderate degree of intoxication towards the evening often leads to pernicious effects, domestic quarrels, and the consequent loss of character and tranquility.”*

The habitual, though not excessive use of wine, in wine countries, exercises an important influence on the character and actions of men in a national point of view.

The Rev. Dr. Hewitt asserts that the French “drink to just that point at which the moral sense and judgment are laid asleep, but all their other faculties remain awake.” “If,” says the same writer, “they do not drink to absolute stupefaction, or intoxication, it is because sensuality with Frenchmen is a science and a system.” Dr. Hewitt advances this opinion as the result of personal observation and experience. Leigh Hunt, in the notes to his translation of “Bacco in Toscana,” describes the effects of the noon draughts of wine on the labourers, peasantry, and small shop-keepers in Tuscany, as “perceptible after dinner, though no disorder ensues; the wine being only just enough to move the brain pleasantly, without intoxication.”

The physical and moral evils, which result from this custom, forms a subject of investigation not unworthy the attention of the moralist and legislator.

5. *Intemperance is considerably modified in its character by the temperament of the individual upon whom it operates.* Various

causes contribute to the development of peculiar temperament. Vitiating education, and irregular moral and physical training, are amongst the most prominent; in addition, perhaps, to a mental or physical conformation natural to each member of the human family.

Macnish, in his well known work, specifies seven varieties of temperament as modified by drunkenness; viz.: The Sanguineous, Melancholy, Surly, Phlegmatic, Nervous, Choleric, and Periodical.* A few general observations will suffice to elucidate the subject in question. Individuals of a *sanguineous* temperament are easily excited and noisy and spirited, over their cups. They form the principal source of attraction at meetings of a convivial description, and are soon affected even by moderate vinous indulgence. Their convivial qualifications form a dangerous source of temptation to excess.

Choleric temperaments, like the sanguineous, have highly susceptible nervous systems, as well as physical powers predisposed to inflammatory action.

Other temperaments, on the contrary, are not easily elevated by vinous indulgence. The Phlegmatic class of drinkers, in general, are not roused from their natural lethargy, at a time when the former class are either altogether or in a great measure overpowered by bacchanalian indulgence.

In addition to these is a variety of shades, in the nature of which the preceding characters more or less participate. The *Melancholic* drunkard is subject to most distressing paroxysms of despondency, which succeed to, and totally extinguish all his preceding sensations of pleasure. The lives of some of our eminent literary characters form striking and pitiable examples.

Burns, the Scottish Bard, for example, appears to have been subject to lowness of spirits from an early period. But until that period of his life when he commenced his career as an author, and when his growing celebrity occasioned his being in company, his biographer states that he does not remember to have seen him intoxicated, nor was he at all given to drinking. "No sooner, however, was he led into intemperance, than his disorder became aggravated, and *his dejection, from being a casual occurrence, became continual.*"

The celebrated Dr. Johnson, sought relief at one period of his life, from distressing and habitual gloom, in the pleasures of wine. He found, however, that indulgence in the joys of Bacchus, imparted but temporary relief—the pangs of sorrow returned with redoubled vigour. He abandoned therefore the practice, as unsuccessful and dangerous. Quaint old Burton justly exclaims, "as good be melancholy still, as drunken beasts and beggars."† Jeremy Collier with equal

truth remarks, that this popular nostrum is but "skinning over an old ulcer," and thus by flattering the wound preparing the way for mortification. "To be intemperate," he further says, "for the ease of ones mind, is to cure melancholy with madness."*

Many of these varieties of temperament are the necessary result of irregular moral and physical education. The early and frequent use of alcoholic stimulants is well known to be a productive source of nervous excitement and irritable temperament.

The use of intoxicating liquor is more particularly dangerous to persons of sanguineous and choleric temperament, who, under the inflaming influence of strong drink, are readily excited to deeds of a daring and impetuous character. "I know some men," observes Dr. Trotter, "who are only temperate from the dread of exciting furious passions by the use of wine, their dispositions being naturally bad, they are afraid to drink."† The annals of crime are fruitful with appropriate illustrations.

In no one instance does the use of inebriating liquor benefit these varieties of temperaments. It stimulates the sanguineous to higher and more dangerous pitches of excitement. The melancholic, unhappily and invariably find indulgence succeeded by still deeper shades of depression, while the temperament of the phlegmatic, although temporarily roused, after the fumes of the glass have effectually subsided, again assumes its natural character.

6. *Intemperance is modified to a considerable extent by the inebriating agent by which it is produced.*

Alcohol either in its palpable and visible form, or in its latent and disguised existence, is now universally known to be the great agent of intoxication; and the effects resulting from its use are in proportion to the purity and strength in which it is employed. The use of alcohol, in the form of ardent spirits, is more injurious and exciting than in any other association, because it is more concentrated in that state than in fermented liquors. Malt liquors, for instance, do not contain so much alcohol as ardent spirits; and from the narcotic drugs with which they are combined, are less stimulating and more sluggish in their effects. The stupifying and deadening operation of malt liquors forms a striking contrast to the more active and all exciting influence of ardent spirit. A man who freely indulges in malt liquors, soon becomes incapable of steady and continued exertion;—the spirit drinker, on the contrary, has his passions roused to greater excitement,—the circulation of his blood is not clogged, but quickened, and he is ready for rash and unpremeditated action. Hence an important distinction which exists in the comparative effects of these liquors in the production of crime. Some writers contend

* Anatomy of Drunkenness, p. 52.

† Anatomy of Melancholy.

* Dialogue between Eueratius and Cœnophilus.

† Trotter's Essay on Drunkenness.

that less drunkenness exists at the present time than at a former period. The admission of this fact, however, as Mr. Poynder observes, does not prove that there is less drinking, or less crime. The public eye may behold less drunkenness than when beer was more exclusively the national drink, but there may, at the same time, be so much more drinking, and so much more crime.

Of late years an erroneous opinion has been somewhat extensively propagated, indeed not unfrequently advanced, by some of our distinguished legislators,—*that the introduction of pure wine into common use, would be productive of more sober habits in the people, if it did not altogether eradicate the evil of intemperance.* Jefferson, the American President, entertained this notion, “I rejoice,” says he, “as a moralist, at the prospect of a reduction of the duties on wine by our national legislature.—No nation is drunken where wine is cheap; and none sober where the dearness of wine substitutes ardent spirits as the common beverage. It is in truth the only antidote to whiskey.—Its extended use will carry health and comfort to a much enlarged circle,” &c.* These remarks are warmly recommended by a writer in a popular magazine, who at the same time admits, that malt liquor “has been tried as a preventive of intoxication, and found wanting.”† Busby states that “the demand for sweet wines from America has greatly increased, since the general establishment of Temperance Societies in that country.”‡ The operations of the Total Abstinence Societies fortunately bid fair to explode this dangerous notion.

The history of wines, on investigation, will be found to be fruitful in the production of every species of moral and physical evil, which in general arises from the use of intoxicating liquors. The general use even of weak intoxicating wines, has invariably been followed by an irresistible desire for those of a stronger description. The strongest wines were held in most esteem among the sensual part of Greeks and Romans. In England our distinguished historians testify, that the most potent wines were held in greatest estimation. In the twelfth and thirteenth centuries, wines were to be had in great plenty in England, and drunkenness existed to a most fearful extent. Hollinshed declares, that at this time, “*the strongest wines were in greatest request, and that claret and other weak wines were little valued.*”

In the present day a similar partiality exists in favour of strong wines. Newman and Brande inform us, that *the wines in common use in this country, are three times stronger than those made use of in 1750.* The celebrated Dr. Cheyne makes the following pointed remarks on this subject. “They

begin,” he observes, “with the weaker wines; these by use and habit will not do, they leave the stomach sick and mawkish; they must fly to stronger wines, and stronger wines, and stronger still, and run the climax through brandy, to Barbadoes, and double distilled spirits, till at last they can find nothing hot enough for them.” These facts show, to an awful extent, that *the appetite for strong drink is progressively increased by indulgence.* Stimulants indeed are used for the pleasing sensations they produce, and few persons, as experience sufficiently demonstrates, remain long satisfied with the use of mildly intoxicating liquors. The Armenians, for example, prepare wine on purpose for the degenerate portion of the Mahomedans, (Persians) by adding lime, hemp, and other ingredients, to increase its pungency and strength. “*The wine that soonest intoxicates is accounted the best, and the lightest and more delicate kinds are held in no estimation among the adherents of the prophet.*”*

A recent writer states, from personal observation, that it is the “custom in Persia to fortify the wines by an infusion of nuxvomica and lime, in order to strengthen their fiery, and to increase their inebriating, qualities, which a hard drinking Persian is apt to esteem.”†

An increased desire for more potent alcoholic liquors is found to exist in Paris, the capital of a wine growing country. According to government returns in 1835, there were consumed in Paris, 326,000 hogsheads of wine, and thirteen thousand hogsheads of brandy, besides considerable quantities of cider, perry, and beer. If the population at that period be estimated at 800,000, this return allows about a barrel of wine and a gallon of brandy, for the annual consumption of each individual.

Those who advocate the introduction of pure wines into general use in this country, do so, it is presumed, under the idea that their use will promote the health and comfort of the people. Science, however, demonstrates that, wines which have undergone fermentation do not possess nutritive properties. Universal experience coincides with the result of scientific investigation. It is moreover an undeniable fact, that in those continental districts where the peasants abstain from wine, and drink water only, they enjoy better health, possess more activity and are, in every sense of the word, in the enjoyment of advantages from which those persons are debarred who make use of wine as a common beverage. The following remarks of Smollett, on the effects of wine on the peasantry of France are forcible and important. “It must be owned that all the peasantry who have wine for their ordinary drink, are of a diminutive size, in

* Jefferson's Mem., &c., Vol. iv. p. 320.

† Penny Magazine, 1835, p. 236.

‡ Visit to the Vineyards of France and Spain.

* Henderson's History of Modern Times.

† Tour in Turkey and Asia, by the Rev. H. Southgate.

comparison to those who use milk, beer, or even water; and it is a constant observation, that when there is a scarcity of wine, the common people are always more healthy than in those seasons when it abounds." "The longer I live," remarks the same writer, "the more I am convinced, that wine and all fermented liquors are pernicious to the human constitution; and that for the preservation of health, and exhilaration of the spirits, there is no beverage comparable to simple water."*

VII. *The habitual use of alcoholic liquors effects important changes in the temperament.* It is difficult to determine the precise nature of these changes. They depend on some essential alteration in the nervous system as well as in the circulation. It is well known that the mind operates through the medium of the brain; which latter organ participates in every bodily disorder, particularly in derangement of the stomach, and the viscera employed in digestion. Hence we perceive how derangement of the organs produces a disordered state of the mind. The moral powers also sympathise with all essential alterations in the physical system.

"It is certain," says Dr. Trotter, "that a long use of vinous spirit, in any form, produces alterations in the sentient principle or nervous system."†

Michaelis places the following, among other of the usual causes of the prevalence of suicide:—"The alteration in the natural temperament, by too much indulgence in a flesh diet, and in drinking heavy nutritious ale. This is probably the case in England, where the defenders of the poor, as they are called, consider very strong fattening ale, as what every man ought in justice to have; not considering that it is quite an artificial drink; that man is naturally a water drinker, that when he is so he seldom fails to be cheerful and healthy; and that his first stage in the descending scale is to become a drinker of wine."‡

Sir W. Temple also appears to have been impressed with the influence of wine on the temperament. "I have sometimes thought," he remarks, "that this custom of using wine for our common drink, may alter in time the very constitution of our nation, I mean the native tempers of our bodies and minds, and cause a heat and sharpness in our humours which is not natural to our climate."||

These views correspond with the experience of Dr. Cheyne. "Wine," he remarks, "is now become as common as water, and the better sort scarce ever dilute their food with any other liquor; and, as natural causes will always produce their proper effects, their blood becomes inflamed into gout, stone, rheumatism, fevers, pleurisies, &c.

*Their passions are enraged into quarrels, murders, and blasphemy; their juices are dried up, and their solids scorched and shrivelled. Those whose appetite and digestion are good, never want strong liquors to give them spirits. Such spirits are too volatile and fugitive for any solid or useful purposes in life. Two ounces of flesh meat, well digested, beget a greater stock of more durable and useful spirits, than ten times as much strong liquors."**

Contrast with these effects of wine, the influence of water on the various temperaments, as described by Hoffman, the learned German Professor, and Physician to the King of Prussia:—"Water, by its fluidity and mildness, promotes a free and equable circulation of the blood and humours through all the vessels of the body, upon which the due performance of every animal function depends; and hence, water-drinkers are not only the most active and nimble, but also the most cheerful and sprightly of all people. In sanguine complexions, water, by diluting the blood, renders the circulation easy and uniform. In the choleric, the coolness of the water restrains the quick motion and intense heat of the humours. It attenuates the glutinous viscosity of the juices of the phlegmatic; and the gross earthiness which prevails in melancholic temperaments. And as to different ages, water is good to children,—to make their tenacious milky diet thin, and easy to digest; for youth and middle-aged people,—to sweeten and dissolve any scorbutic acrimony and sharpness that may be in the humours, by which means, pains and obstructions are prevented; and for old people,—to moisten and mollify their rigid fibres, and to promote a less difficult circulation through their hard and shrivelled vessels."

SECTION II.

HISTORY OF INTEMPERANCE.

Boundless intemperance

In nature is a tyranny: it hath been
The untimely emptying of the happy throne,
And fall of many kings.—SHAKESPEARE.

Wine and wassail have taken more strong places
than gun or steel.—CHESTERFIELD.

I. Scriptural illustrations of intemperance.—II. Intemperance of the Persians.—III. Macedonians, Philip and Alexander.—IV. Thracians and Scythians.—V. Gauls and Germans.—VI. Greeks and Romans.—VII. Other nations of antiquity.

I. THE History of Intemperance presents a melancholy subject of instruction and warning to mankind. It has been asserted that history is philosophy, teaching by examples. The correctness of this definition, is, in no instance, so powerfully exemplified, as in that of intemperance.

* Travels through France and Italy, 1776.

† Essay on Drunkenness. p. 146.

‡ Smith's Michaelis, vol. iv. p. 215.

|| Essay on Gout.—Miscellanea

* Cheyne on Long Life, &c., p. 43, Ed. 1745.

The frugal habits of the primitive inhabitants of the earth, exclude as impossible the existence of gross intemperance in early times. Isolated cases which occurred at a remote period, are recorded in the Old Testament. These, however, rather present striking examples of human frailty, than illustrations of a vice general in its existence. Those of Noah and Lot are the earliest instances with which we are acquainted.

At a later period the vine became more generally cultivated, and examples of intemperance were less rare in their occurrence.

The most powerful nations then in existence, were composed of scattered and nomadic tribes, of pastoral and predatory habits. They were accustomed to hold frequent feasts, either in honour of their gods, or to commemorate signal successes gained over their enemies. Important deliberative concerns were transacted on such occasions, a custom, which, even at the present day, prevails among barbarous nations.

In the instance of Sampson, the Philistines assembled together to offer a sacrifice to their god Dagon, for having delivered their formidable enemy into their hands. "When their hearts were merry," Sampson was brought into their presence, that they might make sport with him. Sampson called upon the Lord to assist him, and his enemies were destroyed in the midst of their rejoicings.

Another example of intemperance is found in Nabal, whose churlish conduct towards David would have been attended with serious results, had not the timely presents of his more prudent wife conciliated the anger of the king. Abigail on returning home found her husband feasting and "very drunken." The following morning she acquainted him with his fortunate escape. This information had so serious an effect on Nabal's frame, debilitated as it was by his previous excesses, that in ten days afterwards he died.

In the reign of Saul, the Amalekites made an irruption into the borders of Palestine, and harassed the people of Israel. After the pillage of Ziklag, the residence of David, the latter pursued and found them "spread abroad upon all the earth, eating and drinking." A few only escaped the avenging hand of their enemies.

In the case of Amnon, the son of David, and of Elah, King of Israel, signal examples are presented of the evils which befall those who become slaves to sensual indulgence. The domestics of Absalom slew Amnon when his heart was "merry with wine:" and Elah, when he was "drinking himself drunk," was slain by his servant Zimri.

The Syrians also were more or less addicted to intemperance. When Benhadad, King of Syria, besieged Samaria, Ahab, by direction of the prophet, surprised and defeated this warrior, whom he

found with thirty-two kings "*drinking themselves drunk in the pavilions.*"

One of the books of the Apocrypha acquaints us with an interesting example of the effects of intemperance on the Assyrians, who, but for the event in question, had every reasonable prospect of making conquest of Judea. Bethulia was closely besieged by Holofernes, chief captain of Nabuchodonosor, King of the Assyrians. Destruction, either by thirst or by the sword, to all human foresight, appeared inevitable. A powerful army had assembled before the gates of the city, and by a device of the enemy, the fountains from which they had obtained a supply of water, were rendered unavailing. Judith, a woman of wonderful courage and surpassing beauty, happily effected their deliverance. In company with her maid she visited the tent of Holofernes, and cunningly held out to him hopes of effecting the speedy and easy capture of the city and its inhabitants. Holofernes, fascinated by the charms of her person, prepared a feast for his fair guest, at which he "drank much more wine than he had drunk at any time in one day since he was born." In the hour of night Judith approached the couch of the chief, who was "filled with wine," and cut off the head of the intended destroyer of her kindred and nation. The Jews greatly encouraged by this event, suddenly fell upon the Assyrians, who were in utter amazement and fright, and slew them with a terrible slaughter.*

In Isaiah, and in succeeding books, ample evidence is found of the declining morals of the Jews. The prophets in the most energetic terms denounce the sensual habits which prevailed at that period, and depict in glowing language the awful consequences of this debasing vice.†

The Ephraimites, a people peculiarly favoured by the fertility of their land, and the beauty of its situation, were remarkable for their indulgence in sensual delights. The prophet Isaiah, thus strongly exhibits their abuse of the bounty of Providence:—"Woe to the crown of pride, to the drunkards of Ephraim, whose glorious beauty is a fading flower; which are on the heads of the fat vallies of them that are overcome with wine."‡ The intemperance of the times is further seen in the drunkenness of their king:—"In the days of our king, the princes have made him sick with bottles of wine."||

The most awful feature of these times is witnessed in the intemperance of the priesthood. Even that sacred office was profaned through the influence of strong drink. "But they also have erred through wine, and through strong drink are out of the way: the priest and the prophet have erred through strong drink, they are swallowed up of wine; they are out of the way

* Apocrypha. The Book of Judith.

† Isaiah lvi. 12., v. 11, 12; xxiv. 9, v. 22.

‡ Isaiah xxviii. 1. || Isaiah xxxviii. 7, 8.

through strong drink; they err in vision, they stumble in judgment. For all tables are full of vomit and filthiness, so that there is no place clean."*

In the prophet Jeremiah it is written, "Thus saith the Lord, behold I will fill all the inhabitants of this land, even the kings that sit upon David's throne, and the priests, and the prophets, and all the inhabitants of Jerusalem with drunkenness."†

The Nazarites, a people specially pledged to abstain from wine, were led astray by its influence. "But ye gave the Nazarites wine to drink."‡

No more decisive proof can be adduced of the indignation of God against those who indulged in strong drink, than the symbolical and threatening language of the prophets. In speaking of Jerusalem, they evidently allude to the medicated wines then in common use. These predictions were awfully fulfilled in the instance of Babylon. Babylon was the mightiest among the nations of the earth. Her kings, and rulers, and people, were immersed in luxury and dissipation. This example was injurious to surrounding nations, who, as in the instance of the Jewish people, drank of her wine and were made mad. "Babylon hath been a golden cup in the Lord's hand, that made all the earth drunken. The nations have drunken of her wine, therefore the nations are mad."||

The active and warlike habits of the people of Babylon were soon abandoned for effeminate indulgence, and eventually this renowned race became a bye-word and reproach. "The mighty men of Babylon have forborne to fight; they remained in their holds; their might hath failed, they became as women."§

Cyrus was the chosen instrument in the hands of the Almighty, for punishing the riotous Babylonians. Belshazzar was engaged in one of the numerous feasts which were held in that immense city. Prophecy was never more signally fulfilled. "In their heart I will make their feasts, and I will make them drunken, that they may rejoice and sleep a perpetual sleep, and not awake, saith the Lord."¶

Cyrus, who had taken measures for surprising the city, came upon them with his army during the continuance of their revels, which had been prolonged to a late hour, and slew the king, with those who were in attendance. Many, no doubt, in a state of drunken lethargy, would sleep a perpetual sleep. The city was taken without difficulty, and the Babylonish empire fell an easy prey to her intrepid conquerors.

Nineveh, at the time of its destruction the capital of the Assyrian empire, fell an easy prey to the Medes, whilst its luxurious inhabitants were engaged in one of their sensual entertainments. The prophet Nahum predicts this event in most forcible

language.* Diodorus Siculus relates that "it was while the Assyrian army were feasting for their former victories, that those about Arbaces (the commander of the Medes) being informed by some deserters of *την ραθυμiam και μεθην*, the negligence and drunkenness, in the camp of the enemies, assaulted them unexpectedly by night, and falling orderly on them disorderly, and prepared on them unprepared, became masters of the camp, and slew many of the soldiers, and drove the rest into the city."

II. Cyrus was the illustrious founder of the Medo-Persian empire. At first possessed of a country containing only about 100,000 inhabitants, he became by his temperate example and warlike abilities, the head of a nation, at that time considered almost boundless in its extent, and certainly unrivalled in its power. The victories of Cyrus, however, laid the foundation of the ruin of the empire. Luxurious habits, the bane of national prosperity, had been partially introduced before his death; and there are grounds for believing that the conqueror himself was cognizant of their introduction. The union of the Medes with the Persians, had considerable influence in producing this change. The Medes were a people of luxurious habits, and differed in most respects from their temperate and warlike allies. The possession of Babylon also contributed to corrupt the manners of the Persians, who in a short space of time, became as remarkable for their effeminacy and intemperance, as they had previously been conspicuous for sobriety and physical strength. Hence, they fell an easy prey to the Macedonian king. Herodotus relates, that in his time they drank profusely. "They are accustomed," says he, "to deliberate on matters of the highest moment when warm with wine; but whatever they in this situation may determine, is again proposed on the morrow, in their cooler moments, by the person in whose house they had before assembled. If at this time also it meets their approbation it is executed; otherwise it is rejected." "Whatever also," says the same writer, "they discuss when sober, is always a second time examined after they have been drinking."

Strabo also makes mention of this singular custom.† Dampier informs us that a similar practice obtains among the inhabitants of the Isthmus Darien.

In more recent times, the Persians have displayed a similar fondness for intoxicating liquors, although under Mahomedan sway, and, in general, professors of the religion of Mahomet, which forbids the use of wine.

Sir J. Chardin, in his travels, frequently alludes to the drinking customs of this nation. "We may assert with boldness," says he, "that there is no country where they drink more or better wine."‡

* Hosea vii. 5. † Jer. xiii. 13. ‡ Amos ii. 12.
Jer. li. 7. § Jer. li. 30. ¶ Jer. 51, 39.

* Nahum i. 10, ii. 9. † Strabo Geogr. Ch. 15.
‡ Travels in Persia. London Ed. 1686, p. 189.

The Persians, in abstinence from wine, have been less strict followers of Mahomet than some other nations that have adopted his creed. Persia, with its tributary Georgia, is remarkable for the variety of delicious fruits which it produces. The grape in that country has been brought to a high state of perfection; and the Persian wines have always been celebrated for their strength and richness of flavour. Sir J. Chardin, who travelled extensively in that country in the seventeenth century, states that as much as a horse could carry of their best wines could be purchased for twelve shillings, and that the more common sorts did not cost more than half the money.

Hafiz, the favourite poet of the Persians, frequently makes the praise of wine the subject of his poetical effusions. His predilection for this liquor may be seen from the following verses:—

“I am neither a judge, nor a priest, nor a censor, nor a lawyer, why should I forbid the use of wine?”

“That poignant liquor, which the zealot calls the mother of sins, is pleasanter and sweeter to me, than the kisses of a maiden.

“Give me wine! wine that shall subdue the strongest, that I may for a time forget the cares and troubles of the world.

“The roses have come, nor can anything afford so much pleasure as a goblet of wine.

“The enjoyments of life are vain; bring wine, for the trappings of the world are perishable.”

Hafiz is usually denominated the Anaereon of the Persians.

Tavernier relates that in Armenian Persia, after they have removed the cloth and given thanks, they proceed to drink to excess. The man who gives an entertainment, thinks that he has not done well, till he has made his guests so drunk, that they cannot find their way out of the room. The more they tumble about, the less reason he thinks he has to regret the expense.†

The same author testifies that the Persian Georgians are also very great drinkers. “They love,” says he, “the strongest drinks best, for which reason, both men and women drink more *aqua vitæ* than wine.” “It is also observable,” he remarks, “that at the women’s festivals, there is more wine and *aqua vitæ* drunk than at the men’s.” Besides sweetmeats, each guest on entering the dining room, is presented with a glass containing half a pint of *aqua vitæ* to excite his appetite.

A modern traveller informs us that the Persians imagine that they diminish the sin of vinous indulgence, by partaking only of wine which is manufactured by unbelievers. “So great is the horror of a Mohammedan vintage, that wherever jars of the wine of Shiraz are discovered, the chief officers of

the town are ordered to see them broken to pieces.”*

Sir J. Chardin, the celebrated traveller, was present at an entertainment at the house of a royal prince. He describes their manner of drinking as follows: The prince’s nearest relations, selecting about eight in number, were first presented with vessels of wine, which they drank standing up. The same bowls being filled again were carried to the next persons, and so on, until the health had been drunk round. After this, the next health was drunk in larger cups, for it was the custom of the country to drink the healths of great personages in large vessels. This was done on purpose to make their guests more effectually drunk. This desired elimax would soon be attained, when we consider the size of their glasses. The first glasses used were of the common sort, but the last contained about a pint and a half of wine. This feast continued until the following morning. The capuchins and Sir J. Chardin were exempted from drinking—“for,” declares the latter, “had I drank as much as my neighbours, I had died upon the spot.”†

III. The ancient Macedonians were warlike in their habits, and, under Philip and Alexander, successful in their enterprises. Philip was one of the most subtle politicians of the age in which he lived; and, as a general, displayed great superiority in the discipline of his army. A slave to intemperance, this celebrated monarch, however, frequently abandoned himself to the most disgusting excesses. He is said to have passed much of his time at dissipated feasts, and to have associated with debauchees of the most profligate character. Philip, at a late period of his life, became enamoured of a lady named Cleopatra, whom he eventually married. A feast was held to celebrate the joyful event, at which were present Alexander and Attalus, her uncle. Attalus became inebriated, and insulted Alexander, by requesting the Macedonians to unite in prayer, that this marriage might produce a *legitimate* heir to the throne. The youthful hero, irritated at this insolence, retorted by throwing his cup at the offender’s head. Philip in a passion now interfered, and drawing his sword made towards his son. Anger and wine, however, had so enervated him that he fell in the attempt. Alexander took advantage of this event and cried aloud, “Men of Macedon, see there the man who was preparing to pass from Europe into Asia! he is not able to pass from one table to another without falling.”

The following anecdote is related of Philip:—A woman requested justice from him for some alleged injury, and in detailing her case, made statements which were not pleasing to the king. Philip, after hearing

* Tavernier’s Persian Travels, vol. i. p. 121.

* Travels in Georgia and Persia, by Sir R. Ker Porter, vol. i. p. 348.

† Sir J. Chardin’s Travels, pp. 228 9.

her arguments decided the case against her. The woman, who it appears possessed a resolute spirit, on hearing the decision, replied with great calmness, "I appeal!" "How," said Philip, "from your king, to whom then?" "To Philip, when sober," was the spirited reply. The conduct of the king on this occasion, was worthy of a more virtuous man. He took the case a second time into consideration, repented of his previous injustice, and rendered the woman redress for her grievances.

Philip fell by an assassin's hand, in the midst of his triumphant career, the indirect victim of intemperance. Attalus, uncle of Cleopatra, when highly excited by wine, at one of the frequent carousals which Philip patronized, grossly insulted a young noble, named Pausanias. The latter demanded justice on the person of Attalus, but the king denied his request. Irritated at this disappointment, the young man refused to be pacified by the honours which were conferred upon him with that intent, and under the influence of exasperated feelings, resolved to murder his sovereign. This deed was perpetrated on the day when the king was celebrating, with unusual splendour, the marriage of his daughter. Not content with other demonstrations of his greatness, Philip had ordered twelve representations of gods to be publicly displayed in the procession, in addition to which was one more magnificent than the rest, whereby he asserted to the public his claim to divine honour. Whilst receiving the acclamations of surrounding multitudes, and unusually elated with pride, the dagger of Pausanias, with fatal aim, at once put an end to the monarch's life.

Alexander, who succeeded his father as king of Macedonia, became remarkable not only for his military success, but for his intemperance, to which vice he ultimately fell a victim. In early life he displayed considerable promise of that greatness which he afterwards attained. Love of military fame ever appeared to be the impulse of his conduct; to accomplish which object, he sacrificed every minor gratification. In the commencement of his public career, Alexander, in general, was temperate in his diet. When a variety of choice dishes was sent to him by the Queen of Caria, together with some excellent cooks and bakers, he remarked, that he had no need of them; for he had been supplied with better cooks by his tutor Leonidas: viz. "a march before day to dress his dinner, and a light dinner to prepare his supper." "Nor was he," says Plutarch, "so much addicted to wine as he was thought to be. It was supposed so, because he passed a great deal of time at table; but that time was spent rather in talking than drinking; every cup introduced some long discourse." His contempt of luxury may be ascertained from his examination of the tent of the conquered Darius,

when he expressed his surprise that such effeminacy should occupy the attention of a king. It would have been fortunate for Alexander had he always remained thus uncorrupted by Persian luxury. The unparalleled success, however, which attended his arms, so intoxicated his mind, that he frequently committed deeds, which, in others, would have been deemed evidences of insanity.

Alexander subsequently indulged in repeated acts of intoxication, under the influence of which, he so far forgot himself, as in more sober moments, to excite in him bitter regret. During one of these fits of inebriation, he attempted to burn the ancient palace of Xerxes. His friends were enjoying the royal feast, at which they drank to intoxication. Courtezans were present at the sparkling board, and one of the most celebrated urged the conqueror to end the carousal by burning the palace of Persepolis. Alexander madly complied with her wish; and with the drunkard's garland on his head, and a lighted torch in his hand, proceeded to execute his purpose. The king, however, quickly repented this foolish freak, and before it was too late, commanded the fire to be extinguished. Soon after this event, Alexander, when excited with wine, killed his friend Clitus. The latter had supped with the king, and when both were "warmed with drinking,"* uttered some remarks which were displeasing to Alexander; reerimination followed; and although the friends of Clitus had dragged him away, he soon returned to the scene of disagreement. Alexander, irritated by his boldness of speech, snatched a spear from one of the guards, and ran it through the body of his unfortunate victim, who immediately expired. Persius thus alludes to this calamitous event:—

*Sed tremor inter vina subit calidumque triental
Executite manibus.†*

The rage of Alexander now quickly settled into the deepest sorrow, insomuch that, but for his attendants, he would have destroyed himself; and for several days he remained in a state of the most lamentable depression.

The triumphant career of this monarch in India was marked by scenes of gross dissipation. His entrance into Carmania indeed appears to have resembled a bacchanalian procession. Alexander and his generals were placed upon a lofty platform, elevated upon a magnificent carriage, which was drawn by eight horses. They were followed by carriages, wherein were placed others of his associates and friends, crowned with garlands, and noisy with wine. The entire army appears to have been in a similar plight. Plutarch remarks that, "in the whole company there was not to be seen a buckler, a helmet, or a spear; but

* Plutarch. Life of Alexander.

† Pers. Sat. iii. v. 100.

instead of them, cups, flagons, and goblets ; these the soldiers dipped in huge vessels of wine, and drank to each other ; some as they marched along, and others seated at tables, which were placed at proper distances on the way. The whole country resounded with flutes, clarionets, and songs ; and with the dances and riotous frolics of the women. This disorderly and dissolute march was closed with a very immodest figure, and with all the licentious ribaldry of the bacchanals, as if Bacchus himself had been there to carry on the debauch.”*

After their arrival at the capital of that country, Alexander prolonged this scene of dissipation. At one of these feasts, when in a state of inebriation, he had to submit to an insult which must have been a source of considerable annoyance, if it did not convince him of the folly of such degrading proceedings. A favourite chorus dancer having won the prize of dancing, felt so elated as to move across the theatre in his ceremonial dress, and seat himself beside Alexander. The Macedonians applauded this audacious act, and obliged the unwilling king, by means of the customary salutations, to express similar approbation.

Alexander shortly afterwards visited Persia, and near the tomb of Cyrus encouraged a scene of drunkenness more degrading, if possible, than any which had preceded. Calanus, an Indian philosopher, labouring under physical indisposition, ordered the erection of a funeral pile, and having requested the king and his friends to pass the day in gaiety and drinking, threw himself upon the fire, and fell a sacrifice to this idolatrous practice of his nation. At the conclusion of the ceremony, Alexander made a feast, and held out inducements to excess by promises of reward. Promachus obtained the principal prize, having drunk four congii of pure unmixed wine. This wretch, however, survived his victory only three days. Athenæus and Ælian inform us, that thirty of these bacchanalians died on the spot, and soon afterwards six more of them expired in their tents.† Plutarch also, on the authority of Chares, attests the same circumstance. He states that forty-one of them lost their lives from intoxication, and the coldness of the weather.

The intemperance of Alexander soon put a stop to his victorious career. Previously to his death, his mind had been much depressed by superstitious forebodings. Plutarch relates that Medias called upon him one day, and persuaded him to engage in a carousal which was then about to take place. “There,” he further remarks, “Alexander drank all that night and the next day, till at last he found a fever coming upon him.” Other writers relate that Alexander drank out of the cup of Hercules, containing about

two congii, to the health of Proteas. The latter, according to the custom of the country, ordered a bowl of similar size to be filled with wine, which he immediately drank off. Alexander complied with the convivial laws at that time so strictly observed, and again pledged Proteas in the same vessel. The effect of this indulgence was so powerful on his previously debilitated frame, that as Athenæus relates, he let the cup drop from his hand, fell back on his pillow, and never afterwards recovered.* Aristobulus states, that during the violence of the fever which afterwards ensued, Alexander who was tormented with thirst, swallowed a draught of wine which hastened his end.† Thus died Alexander the Great, a man naturally possessed of many good qualities ; in war almost unparalleled ; and in private life generous and humane. “Here,” says Seneca, “is this hero invincible by all the toils of prodigious marches, by all the dangers of sieges and combats, by the most violent extremes of heat and cold, here he lies conquered by his intemperance, and struck to the earth by the fatal cup of Hercules.”

IV. The Thracians, a people who resided in a large tract of country to the north of the Archipelago, and adjoining Scythia, were also notorious for their intemperance. They were universally characterized as hard drinkers. Horace says,

“Natis in usum lætitiæ scyphis
Pugnare, Thracum est; tollite barbarum
Morem, vercundumque Bacchum
Sanguineis prohibete rixis.”‡

Again,

“Non ego sanius
Bacchabor Edonis.”||

The Scythians, during the earlier part of their history, were distinguished for their sobriety and bodily strength. They do not at that period seem to have made feasts, except upon rare occasions. Plutarch, in his banquet of seven wise men, says, the Scythians had neither *wines* nor instrumental performers, nor public games. By their valour they obtained the principal possession of Asia, which they retained for the period of twenty-eight years. Of this advantage however, they were deprived, by their subsequent licentious conduct. The primitive habits which formed their principal safeguard, rapidly disappeared before a taste which they acquired for intoxicating liquors. The extent of their intemperance may be conceived from the conduct of Cleomenes, prince of Sparta, during a visit which he made to the Scythians. The Spartans assert “that communicating with the Scythians he became a drinker of wine ; and that this made him mad.” “From which incident,” says Herodotus, “whoever are

* Plutarch. Life of Alexander.

† Athenæus, lib. 10, cap. 10. Ælian Var. Hist. lib. 2, cap. 41.

* Athenæus, lib. 10, cap. 9.

† Plutarch's Lives.

‡ Horace, lib. i. 27.

|| Lib. ii. 7.

desirous to drink intemperately, are said to exclaim, Episcythison, 'Let us drink like Scythians.' '* After retaining possession of Asia for twenty-eight years, Cyaxares, king of Media and Persia, invited the Scythians to a feast, where the greater part of them became intoxicated, and in that state were destroyed. Cyaxares thus obtained possession of Asia.†

Florus relates a similar case in reference to the Istrians.‡

The drinking propensities of the Thracians and Scythians were such, that according to Athenæus, γυναῖκες τε καὶ πάντες αὐτοὶ κατὰ τῶν ἱματίων (ἄκρατον) καταχέμενοι, καλὸν καὶ εὐδαιμον ἐπιτήδευμα ἐπιτήδευειν νενομίκασι, the women, and all the men, thought it a most happy life to fill themselves with unmixed wine, and to pour it upon their garments.|| On this account by the *Thracian way of drinking*, Θρακία πρόποσις, was understood ἀκρατοποσία, *drinking wine not mixed with water*.§ It appears also that the Grecians, and particularly the Lacedæmonians, sometimes used ἀκρατέστερον πίνειν *to drink wine with little or no water*, which practice they termed ἐπισκυθίσαι, "*to act like a Scythian*," because the Scythians were much addicted to drunkenness, and drank wine without admixture with water.¶

In the history of the Thracians may be found one of those revolting acts of treachery, which, among barbarous nations, were not unfrequently committed at feasts. In the time of Tiberius, the kingdom of Thrace was divided into two parts, over one of which reigned the late king's brother, Rhescuporis; the other part was governed by his son Cotys. Rhescuporis, a man of ungovernable passions, conceived a violent hatred against his nephew; and burned with the desire of gaining possession of his more fertile dominion. On the first favourable opportunity he broke out into open and daring aggression. On the interference of Tiberius, Cotys disbanded his army, and in his usual conciliatory spirit, displayed every wish to promote a friendly re-union. Rhescuporis, however, met him in the spirit of treachery. Tacitus informs us, that the latter proposed a banquet at which they might ratify preliminary measures. The parties met, and protracted their festivities until a late hour of the night. Amidst the joys of wine and in the moment of revelry, Rhescuporis treacherously attacked his unsuspecting and innocent nephew, who urged in vain the laws of hospitality. He was loaded with chains, and subsequently put to death. The treacherous uncle ultimately

became the victim of his cruel and dishonourable practices.

V. An instance of intemperance and its effects may be found in the history of the Gauls. Under their chief Brennus, the Gauls overran the Roman Empire, and finally took possession of its capitol; setting fire to various parts of it, and destroying great numbers of its inhabitants. A brave band, however, still retained possession of the capitol. Provisions being scarce the Gauls divided themselves into foraging parties. A large and select division proceeded to Ardea, where Camillus, the Roman hero, lived in retirement. Camillus conceived the design of surprising them, and for that purpose assembled a band of brave associates. The victorious career of the Gauls had inspired them with confidence, and they were thus emboldened to ramble about in a disorderly manner. Having loaded themselves with provisions, they encamped on the plains, and drank so freely of wine, as to neglect the usual precaution of guarding the camp.—Camillus being informed by his spies of their disorderly state, came upon them suddenly in the night. The greater part of them were drunken and asleep; the others were too much surprised to resist, and most of them were put to death. The few who escaped were easily found the next morning, and suffered the untimely fate of their unfortunate companions.

The Germans, in all ages, have been noted for their excessive indulgence in strong drink. The works of ancient authors afford ample proof of their habits in former times. They were a vigorous enterprising, and warlike people; and generally successful in their campaigns. Their attachment to intoxicating liquors, however, frequently produced a reverse of fortune.

Germanicus, the celebrated Roman general, achieved a victory over the Marsi, a German tribe, principally in consequence of their intemperance. That commander had learned, by means of scouts, that the enemy intended to spend the approaching night in celebrating a festival. These festivals were almost always passed in dissipation and riot. Germanicus came upon them unawares; "The barbarians were sunk in sleep and wine, some stretched on their beds, others at full length under the tables; all in full security; without a guard, without posts, and without a sentinel on duty. No appearance of war was seen, nor could that be called peace, which was only the effect of savage riot; the languor of debauch."* Almost the whole of them were slaughtered, while the Romans did not suffer the loss of a single life.

The bravery of the Germans, when unsubdued by strong drink, rendered them wonderfully successful. Tacitus, however, remarks, "Indulge their love of liquor to

* Herod. b. vi. sect. 81; also Athenæus. b. x. c. 7.

† Omnis hostibus insuetos barbaros vinose onerare patitur, priusque Scythæ ebrietate quam bello vincuntur. Justin, lib. i. cap. 8.

‡ Florus, lib. ii. cap. 10.

|| Athenæus, lib. x. s. b. finem cap. 9.

§ Pollux, lib. vi. cap. 3.

¶ Potter's Archaeologia Græca, vol. ii. p. 350.

* Tacitus, b. i. sect. 50.

the excess which they require, and you need not employ the terror of your arms; their own will subdue them." Their drinking customs bore much similarity to those of the Persians, and particularly in the discussion of important matters, at their feasts. Tacitus thus describes their proceedings, "Having finished their repast, they proceed, completely armed, to the dispatch of business, and frequently to a convivial meeting. To devote both day and night to deep drinking, is a disgrace to no man. Disputes, as will be the case, with people in liquor, frequently arise, and are seldom confined to opprobrious language. The quarrel generally ends in a scene of blood. Important subjects, such as the reconciliation of enemies, the forming of family alliances, the election of chiefs, and even peace and war, are generally canvassed in their festival carousals. The convivial moment, according to their notion, is the true season for business; when the mind opens itself in plain simplicity, or grows warm with bold and noble ideas. Strangers to artifice, and knowing no refinements, they tell their sentiments without disguise. The pleasures of the table expand their hearts, and call forth every secret. On the following day, the subject of debate is again taken into consideration: and thus, two different periods of time have their distinct uses; when warm, they debate; when cool, they decide."

The Germans, at a more recent period, have displayed equal attachment to this national vice. De Foe, in his "True Born Englishman," says, *Drunkenness, the darling favourite of hell, chose Germany to rule*. The following statement is found in the Memoirs of Mons. Aug. de Thou, who was a witness of the scenes he describes:—"There is before Mulhausen, a large place or square, where, during the fair, assemble a prodigious number of people of both sexes, and of all ages; there one may see wives supporting their husbands, daughters their fathers, tottering upon their horses or asses, a true image of a Bacchanal. The public-houses are full of drinkers, where the young women who wait, pour wine into goblets, out of a large bottle with a long neck, without spilling a drop. They press you to drink, with pleasantries the most agreeable in the world. People drink here continually, and return, at all hours to do the same thing over again."*

Duke de Rohan, bears similar testimony in his account of a visit to Trent:—"I am well satisfied," says he, "that the mathematicians of our time, can no where find out the perpetual motion, so well as here, where the goblets of the Germans are an evident demonstration of its possibility—they think that they cannot make good cheer, nor permit friendship or fraternity, as they call

it, with any, without giving the seal brimful of wine, to seal it for perpetuity."*

Scheuchzer, a German writer, at a more recent period, remarks as follows:—"Custom, that tyrant of the human race, not only permits drunkenness, but in some sort authourises the practice; insomuch that we see *priests* and *ministers* of the church ascend the pulpit in a state of intoxication, *judges* seat themselves upon the benches, *physicians* attend their patients, and others attempt to perform the different avocations of life in the same disgraceful state."†

"At the beginning of this century," says a recent traveller, "Germany saw three empty wine casks, from the construction of which no great honour could redound to our country among foreigners. The first is, that of Tübingen; the second, that of Heidelberg; and the third, at Gruningen, near Hulberstade; and their dimensions are not greatly different: the Tübingen cask is in length 24, in depth 16 feet; that of Heidelberg, 31 feet in length, and 21 deep; and that of Gruningen 30 feet long, and 18 deep. To complete the disgrace of Germany, in the year 1725, a fourth was made at Königstein, larger than any of the former."‡

The drinking power of the Germans has been commemorated by Owen, in the following lines, which refer to the popular adage—"In vino veritas,"

"Si latet in vino verum, ut proverbia dicunt,
Invenit verum Teuto vel inveniet."

The Grecians and Romans, like the effeminate Persians, during the earlier period of their history, were as remarkable for their temperate habits and bodily vigour, as in after ages, they were enervated by their luxury and excess. The history of these nations presents many curious facts in the annals of intemperance.

VI. The victories of the Greeks and Romans, unfortunately were but the precursors of their degradation and ruin. Their intercourse in particular with those Asiatic nations whom they had subdued led them to acquire habits of dangerous indulgence. Thus, their morals and patriotism became gradually corrupted, and the foundation of future decline was but too securely laid. The bodily prowess and warlike achievements for which the Greeks and Romans were most highly esteemed, gradually gave way to an increasing taste for animal gratifications and effeminate luxury. Juvenal exclaims, *Sævior armis luxuria incubuit victumque ulciscitur orbem.*|| Luxury, more cruel than arms, hath invaded us, and avenges the conquered world. To attain these objects no expense was spared. Sallust. *Catal.* xiii, informs us that they ransacked sea and land, with the view to gratify their appetite—*vescendi causa terra marique omnia*

* Voyage, p. 27, Ed. 1646.

† Physic Sacr. vol. iii. p. 64.

‡ Keysler's Travels. vol. i. p. 97. Juv. vi. 291.

* Memoir de Thou, liv. 11.

exquirere. Juvenal also xi. 14. *Gustus, delicatus, elementa per omnia querunt*: they ransack the elements, that is, earth, air, and water, for dainties to gratify their taste. The culinary occupations which had formerly been considered exceedingly degrading, became the most important of the household; Pliny indeed remarks that the expence of a cook was equal to the cost of a triumph. Incredible sums of money were expended in the purchase of rare and unnecessary articles of diet. Immense sums were lavished in the erection of baths, which, though at first used for cleanly purposes, became eventually an important means of gratifying their effeminate propensities. But on no caterings for luxury did they expend so much money and time as in the preparation of various kinds of wines. Some of the most remarkable scenes recorded in Grecian and Roman history are more or less connected with the drinking habits of the people.

Archias, a chief magistrate of Thebes, was engaged in drinking at a feast, surrounded by his dissolute companions, when a messenger arrived in great haste, with letters which informed him of a conspiracy against his life. "My lord," said the messenger, "the person who writes these letters conjures you to read them immediately, being serious things:"—"Serious things to-morrow," replied the infatuated Archias, in a gay tone, placing the letters under the pillow of the couch on which he was reclining. The delay proved fatal. The patriots who had conspired for their country's weal, made every necessary preparation, rushed that evening into the banquet-room, and slew Archias and all his guests.

Sumptuary laws were enacted by Roman legislators for the purpose of restraining these luxurious habits. Those laws, however, were more or less infringed by characters high in public estimation: it cannot, therefore, excite much surprise that the people generally imitated their example.

Many of the kings, and other rulers of these nations, were notorious for their intemperate habits. Innumerable instances of tyranny, rapine, and confusion, are recorded. Vitellius obtained possession of the Roman throne by means of his notorious vices. By pandering to the vicious propensities of the preceding emperors, he attained to those dignities and powers which eventually enabled him to accomplish his object. After his celebrated victory over Otho, he conducted himself in the most odious and degrading manner. Regardless of the dead, he held several feasts of the most extravagant description on the field of battle, where himself and his debauched companions gratified their intemperate lusts. Such conduct soon disgusted the people, who conspired against the obnoxious tyrant, and put him to a disgraceful death. Lucius Vitellius, brother of the Emperor of the same name, gained possession of the city of Terracina, in con-

sequence of the intemperance of its inmates. The garrison was under the command of Julianus and Appolinaris, "two men," says Tacitus, "immersed in sloth and luxury; by their vices, more like common gladiators than superior officers."—"No sentinel stationed, no night watch, to prevent a sudden alarm, and no care taken to guard the works, they passed both night and day in drunken jollity. The windings of that delightful coast resounded with notes of joy, and the soldiers were spread about the country to provide for the pleasures of the two commanders, who never thought of war except when it became the subject of discourse over the bottle."* Vitellius, acting under the direction of a renegade slave, surprised the city. A most dreadful slaughter ensued, and one of the commanders was put to an ignominious death.

In the civil dissensions which soon afterwards took place, the most dreadful scenes occurred. The city of Rome was the arena of all the calamities attendant upon slaughter and dissipation. While the soldiers of Vitellius and Vespasian were butchering each other, the people were at one time savagely exulting in the bloody exhibition; and at another, actively engaged in riot and debauchery. "The whole city seemed to be inflamed with frantic rage, and at the same time intoxicated with bacchanalian pleasures." Tacitus further remarks, that "Rome had thrice seen enraged armies under her walls, but the unnatural security and inhuman indifference that now prevailed were beyond all example."

At a later period, we find the same attachment to strong drink existed among the Roman people. History teems with instructive examples.

VII. The inhabitants of Tarentum are celebrated for their excesses in bacchanalian pleasures.† Their frequent intercourse with Greece enabled them to gratify their luxurious desires insomuch that the "Delights of Tarentum," became a proverbial expression.

The Parthians are described by ancient authors as having been addicted to numerous vices, and to none more so than to that of drunkenness.‡

The Tapyrians, according to Ælian, indulged to great excess in intoxicating liquors.§

The Illyrians also are said to have been an intemperate people.¶

The Carthaginians and Lydians were both, according to Athenæus, much addicted to drinking.¶

The Cambrians were a fierce people, unaccustomed to eating flesh dressed at the fire, or drinking intoxicating liquors. Florus relates, that after their expedition over the Alps, and subsequently to their indulgence in these hitherto unknown luxuries, they

* Tacitus, b. iii. sect. 76. † Ælian, lib. xii.

‡ Erasm. Adag. § Ælian, lib. iii. cap. 13.

§ Lib. ii. c. 15. ¶ Ibid. x. c. 10.

lost their ferocity, and became more easily conquered by Marius.*

The Byzantins, and other nations of less importance among the ancients, might be here mentioned in the catalogue of those whose habits were intemperate.†

The examples presented in this chapter, sufficiently prove that intemperance existed to a considerable extent among the ancients, and that it was attended with the most deplorable consequences.

SECTION III.

HISTORY OF INTEMPERANCE CONTINUED.

“Righteousness exalteth a nation; but sin is a reproach to any people.”—PROVERBS xiv. 34.

I. Aboriginal inhabitants of Britain.—II. Anglo-Saxons and Danes.—III. Normans.—IV. English.—V. Scotch.—VI. Irish.—VII. Nubians; Natives of Ashantee, Congo, Nicobar Islands, Otaheitan Islands, New South Wales.—VIII. American and Brazilian Savages.—IX. Russians, Kamsehatkans, Laplanders.—X. Swedes.—XI. Prussia.—XII. America.—XIII. France.—XIV. Hartley's Table.

I. A KNOWLEDGE of the manners and customs of the aboriginal inhabitants of the British Islands, can only be acquired from some of the Roman historians, and the well-known practices of other nations, similar in their habits and descent. They have been described as frugal in their diet, possessing much personal beauty, and great hardness of body. The ancient Britons were not, however, proof against the influence of luxury and refinement. “From using,” says Tacitus, “our language and dress, they proceeded, by degrees, to imitate our vices and luxuries; our porticos, baths, and sumptuous entertainments.”‡

It has been seen that the Celts were accustomed to indulge freely in the use of intoxicating liquors. It may therefore reasonably be supposed, that the British, who were of the same descent, indulged also in this injurious practice. These barbarous nations, in particular, were in the habit of holding great feasts, on every important occasion. Pelloutier, thus alludes to this practice. “Among these nations, there is no public assembly, either for civil or religious purposes, duly held; no birth-day, marriage, or funeral, properly celebrated, no treaty of peace or alliance rightly cemented, without a great feast.”|| These feasts generally lasted several days. Athenæus, indeed, records one which was no less than twelve months in its duration.

The most important affairs were transacted at these festivals; and it has already been

shown, in the instance of the Germans, that not unfrequently they were the scenes of bloodshed and murder.

Diodorus Siculus, describes the Gauls, in particular, as being passionately fond of intoxicating liquors. “Of wine,” says he, “which is imported to them by merchants, they are fond to distraction, and drink it to excess, until they are either overpowered by sleep, or inflamed with madness.”*

At one of these feasts, two British princes, in a state of inebriation, quarrelled, and fought with such virulence, that they both died by the wounds they received.

Attila, the cruel King of Hungary, at his marriage feast indulged so freely in intoxicating liquor, that he was found at night, suffocated. This event occurred A.D. 453. With the death of Attila, terminated the important empire of the Huns.

The ancient custom of pledging healths, is by some writers attributed to circumstances which occurred during the invasion of England by the Danes. These haughty conquerors would not permit an Englishman to drink in their presence, without special permission, death being the penalty of disobedience. Their cruel conduct so intimidated the English, that even when permission had been given, they would not take advantage of it, until the Danes had pledged themselves not to endanger their lives while partaking of the liquor.

II. The intimate intercourse which afterwards took place between the Anglo-Saxons and Danes, and the frequent festive meetings which they established, became fruitful sources of intemperance. Hollinshed, in his Chronicles, attests this circumstance. “The Danes,” he remarks, “by nature were great drinkers; the Englishmen, by continual conversation with them learned the same vice.”† This state of things caused the well-known, but inefficient enactment of Edgar—the drinking with measured bowls, or by pegs. Henry remarks that the laws of these times strongly corroborate their intemperate habits, for they did not prohibit excess, but rather encouraged it, and only restrained the commission of certain abominable crimes, which were the result of excessive drinking.

William of Malmsbury adds his testimony to the excessive drinking habits of the Anglo-Saxons and Danes. “The nobility were much addicted to lust and gluttony, but excessive drinking was the common vice of all ranks of people, in which they spent whole nights and days, without intermission.”‡

Many instances are recorded, of bloodshed occurring at their feasts: Edmund the First, indeed, perished at one of them, by the hand of an assassin. His courtiers were in

* Florus, b. iii. c. 3. † Ælian. Lib. iii. cap. 14.

‡ Tacit., vita Agricola, c. 21.

|| Pelloutier. Hist. Celt. b. ii. c. 2. p. 2277.

* Diod. Sicul. lib. v. c. 29, 30.

† Hollinshed's Chronicles, vol. i. book vi. chap. xxiii. p. 159. Edit. 1587.

‡ W. Malmsbury, b. iii.

such a state of intoxication, as to be unable to render him any assistance.

The long continuance of peace, during the reign of Edward the Confessor, was, according to William of Malmesbury, marked with the luxury and vicious manners of the English. Much pains were taken in the preparation of their drinks, which principally consisted of Mead, Ale, Cyder, and similar fermented liquors. The conquest of England by the Normans appears to have been less owing to the prowess of arms than to the effects of intemperance. Previous to the battle of Hastings, the victorious Normans passed the night in fasting and prayer; the Anglo-Saxons devoted the same period to drunkenness and debauch. The Norman soldiers were as inferior to the English in numbers, as the latter sunk in comparison with their invaders in point of temperance. "For," remarks a quaint writer,* "the English, being revelling before, had in the morning their brains arrested for the arrears of the indigested fumes of the former night, and were no better than drunk when they came to fight."† In succeeding reigns, there is sufficient evidence upon record, that the English did not lose their relish for intoxicating liquors. Wines in particular, became important articles of commerce; and a considerable revenue was derived from their importation. The marriage of Henry II., with a French princess who possessed extensive vineyards in the south of France, contributed not a little to the increase of this branch of commerce. In the reign of King John, it had become so important, as to cause the appointment of Officers in every town, to regulate the prices of wines, and other matters connected with their sale. Hoveden, the historian of those times, remarks, that "by this means, the land was filled with drink and drunkards."‡

III. The Norman conquerors of England were, it appears, of comparatively sober and temperate habits, until vitiated by their intercourse with the less sober English. William of Malmesbury, who may be considered as the most correct historian of that age, writes thus,—“The English were much addicted to excessive eating and drinking, in which they sometimes spent both day and night, without intermission. The Normans were very unlike them in this respect, being delicate in the choice of their meats and drinks, but seldom exceeding the bounds of temperance. By this means the Normans lived with greater elegance and at less expense, than the English.”||

Unfortunately this sobriety did not long continue. The Normans gradually adopted the vicious practices of the English, and a corresponding deterioration in their general character immediately succeeded. Peter of

Blois, in one of his letters, thus remarks: “When you behold our Barons and Knights going upon a military expedition, you see their baggage horses loaded, not with iron, but wine; not with lances, but cheeses; not with swords, but bottles; not with spears, but spits. You would imagine they were going to prepare a great feast, rather than to make war.”* The same author also states, —“There are even too many who boast of their excessive drunkenness and gluttony: and labour to acquire fame, by swallowing great quantities of meat and drink.”†

IV. King Henry I., commonly called Beauclerc, in the midst of his prosperity, received from an act of intemperance, a shock, which ever afterwards rendered him miserable. This was the death of his only son, a prince on whose education he had bestowed the greatest care, and who, he expected, was to succeed him on the throne. The marriage of the young prince, to a princess of France, and the possessions he thereby obtained had unfolded to him prospects of great wealth and honour. He embarked for England, in a vessel with fifty rowers, from Harfleur on the coast of Normandy. Turner thus describes the melancholy catastrophe, and its cause:—“Unfortunately the sailors solicited him for wine, and in the gaiety of youth he distributed it profusely. The seamen, the captain, his friends, all became intoxicated, and in this state a giddy desire arose to pass by every ship that was before them. The emulatory whim was instantly adopted; every arm was exerted, every eye was intent on this single object, and the ship was flying with all the velocity that unusually exerted strength could give her, in a fine calm moonlight night; when, by the heedlessness of the inebriated helmsman, she struck suddenly on a rock near the shore, then covered with water, but known and visible at low water. The shock burst through two planks on the left side of the vessel, and the sea entered fast. The prince got into a little boat, and was escaping, when he heard the voice of his sister, shrieking to him to help her; he put back to the ship to take her in, but at the same time so many leaped into it, that it sunk, and every one on board perished. The ship soon disappeared under the waves with all its crew, 300 in number, excepting two persons, a young nobleman and a butcher, who held clinging to the top of the mast.” The butcher only, however, escaped to tell the woeful disaster to the king, who is said to have been so depressed by the news as to have “never smiled again.”

During the several centuries which immediately succeeded this period, it does not appear that the English became more temperate in their habits. The immense quantities of food and drink consumed at feasts, which were frequently held, would

* Fuller's Church History of Britain. b. iii. sect. I.

† *M. de adha. ebr. contra hostes incurantur* p. 10. M. Paris.

‡ Hoveden Annals. || W. Malmesbury. b. iii.

* P. Blescu. Ep. 24.

† Ib. Ep. 86.

appear almost incredible, were it not for authentic records, wherein an accurate description of them is given.

Henry II., A.D. 1216, issued a proclamation wherein it is stated that because of "the outrageous and excessive multitude of meats and dishes which the great men of our kingdom have used and still use, in their castles and by persons of inferior rank, imitating their example beyond what their stations require, and their circumstances can afford, many great evils have come upon our kingdom, the health of our subjects has been injured, their goods have been consumed, and they have been reduced to poverty." This ordinance restricted the number of dishes to be used by the great men of the land, and attached severe penalties to every transgression. In the reign of Edward III., A.D. 1363, sumptuary laws were enacted for arresting the progress of extravagant living among various ranks, but historians remark that they produced little beneficial effect. Immense quantities of wines were consumed at these feasts, and the utmost care was taken to procure them of the richest quality. It appears from Hollinshed, that the strongest wines were in most repute at this period, the weaker sort, such as claret, not being in common demand.

In the reign of Henry III. the Earl of Albermarle, under the influence of wine, ordered upwards of thirty individuals to be hung from the battlements of his castle. A summons is now extant which cites him to answer to the charge before his peers; but in those lawless times, this nobleman did not hesitate to fortify his castle, and set his monarch at defiance, by which means he escaped the punishment which he deserved at the hands of justice.

At a later period, Sir John Fortescue, while illustrating the diet of the rich, and with a view to exhibit the comparative comforts and privileges enjoyed by the English people, thus remarks:—"They drink no water, except when they abstain from other drinks, by way of penance, and from a principle of devotion." At this period, the clergy in particular indulged in luxurious habits, and converted religious festivals into intemperate carousals. In the Northumberland Family Book, are found the following curious items, for the Earl and Countess, during the Lent fast days, viz.; "a loaf of bread on trenchers, two manchetts, (small loaves of white bread) a quart of beer, a quart of wine, half a chyne of mutton, or a chyne of beef boiled." The evening repast of the same lady and lord, was as follows: "Two manchetts, a loaf of household bread, a gallon of beer, and a quart of wine."

The feasts which were held at this period, on all particular occasions, displayed great magnificence, and profusion of provisions of various sorts; and were plentifully supplied with intoxicating liquors. It can scarcely be supposed that temperance was a virtue

practised on these occasions. The following were the items for drink at the installation feast of George Nevill, Archbishop of York, A.D. 1466. "Goodly provision, made for the installation feast," &c.

In Ale, Tuns	300
In Wine, Ditto	100
In Ipocrass Pipe	1

At a magnificent feast given to Queen Elizabeth, by the Earl of Leicester, at Kenilworth Castle, in addition to other stores of intoxicating liquors, 365 hogsheads (twenty-three thousand gallons) of beer alone were drunk. Sumptuary laws were made at this time to restrain excesses; but when the highest authorities in the land set so bad an example, the more humble classes of society might naturally be expected to imitate them. In fact, during a considerable portion of the sixteenth century, intemperance appears to have been the common vice of the country. The citizens of those days were much addicted to drunkenness. Some writers of that period strongly advert to this fact. The most noted taverns are even named, with their situations and qualifications.*

Stubbs, in his "Anatomic of Abuse,"† asserts that the public-houses in London were crowded from morning to night with inveterate drunkards. Harrison, the well-known historian, often refers to the drinking habits of the English during the middle portion of the sixteenth century. He states that above fifty-six kinds of French wines, in addition to about thirty kinds from Italy, Greece, Spain, the Canaries, and other places, were seen at the tables of the wealthier classes. "Furthermore," says this writer, "when these have had their course which nature yieldeth, sundry sorts of artificial stuff, as hippocras and wormwood wine, must in like manner succeed in their turns, beside stale ale and strong beer, which nevertheless bear the greatest brunt in drinking, and are of so many sorts and ages as it pleaseth the brewer to make them."‡

Harrison describes the social meetings of tradesmen and artisans as follows:—"If they happen to stumble upon a piece of venison and a cup of wine or very strong beer or ale, (which latter they commonly provide against their appointed day,) they think their cheer so great, and themselves to have fared so well, as the Lord Mayor of London, with whom, when their bellies be full, they will not often stick to make comparison, because that of a subject there is no public officer of any city in Europe that may compare in port and countenance with him during the time of his office."

Ale appears to have been a favourite

* Vide Contin. to Henry's Hist. of England, vol. ii. p. 269.

† Page 73.

‡ Historical Description of the Island of Britain, Chap. vi. Book 2.

potation with the lovers of strong drink at that period. "Certes," says our historian, "I know some ale-knights so much addicted thereunto, that they will not cease from morrow until even to visit the same, eleansing house after house, till they either fall quite under the board, or else, not daring to stir from their stools, sit still, winking with their narrow eyes, as half sleeping, till the fume of their adversary be digested, that he may go to it afresh."

In a subsequent part of the same work Harrison again justly reproaches the English for their bibulous propensities. He makes pointed allusion to their indifference as to good bread, compared with the appetite they exhibit for drink as strong as it can be made. In regard to country towns, he remarks, "There is such heady *ale* and beer in most of them, as for the mightiness thereof among such as seek it out is commonly called huff-cap, mad-dog, angel's-food, dragon's milk, (in addition to other expressive, but not very delicate epithets.) It is incredible to say how our malt-bugs lug at this liquor, even as pigs should lie in a row lugging at their dame's teats, till they lie still again and be not able to wag. Neither did Romulus and Remus suck their she-wolf, or shepherd's wife Lupa, with such eager and sharp devotion as these men hale at huff-cap till they be as red as cocks, and little wiser than their combs."*

This tippling propensity, with its evil consequences, moral and physical, is well described in a song, published A.D. 1551, and said to have been the first drinking song of merit, written in this country.† The two first verses of this song are inserted for the information of the reader.

I cannot eat but little meat,
My stomach is not good;
But sure, I think, that I can drink,
With him that wears a hood.
Though I go bare, take ye no care,
I nothing am a colde;
I stuff my skin, so full within,
Of jolly good ale and olde.

CHORUS.

Backe and side, go bare go bare,
Both foot and hand go colde;
But belly, God send thee, good ale enoughe,
Whether it be new or olde.

In the following verse, the delicate appetite of the drunkard is still further portrayed.

I love no rost, but a nut brown toste,
And a crab laid in the fire;
A little bread shall do my stead,
Muche bread I noight desire.
No frost, no snowe, no winde I trowe,
Can hurt me if I wolde;
I am so wrapt and thorougely lapt,
Of jolly goode ale and olde.

Backe and side, &c.

The last verse, in reference to those

"good soules, that have scoured bowles," concludes thus:

"God save the lives of them and their wives,
Whether they be young or olde."

Camden and Baker, both agree that the English indulged more in intemperance after the Dutch war. Baker states, that after this war, the English learned to be drunkards, and so much deluged the kingdom with this vice, that laws were obliged to be enacted for repressing it.*

Camden, it would seem looked upon the vices of the English, at a previous period, as not so venial as the statements of other writers would represent. "The English," he remarks, "who hitherto had, of all the northern nations, shown themselves least addicted to immoderate drinking, and been commended for their sobriety, first learned, in these wars in the Netherlands, to swallow large quantities of intoxicating liquors, and destroy their own health, by drinking that of others.†

Similar luxurious habits existed in succeeding reigns. Many and severe complaints were made against the clergy, in particular, some of whom are described as having led dissolute lives. This bad example may be supposed to have had a corresponding influence on the people, who in general have been found but too willing to imitate vices sanctioned by the practice, though opposed to the precepts, of their spiritual pastors and teachers.

Numerous historicial notices are recorded of the intemperate habits of the people in the seventeenth century. During the reign of James I., intemperance was no less prevalent than it had been under former monarchs. James, on his accession, rather encouraged this vice, by the passing of laws for the increase of houses appropriated to the sale of intoxicating liquors; but, as will afterwards be found, the result so clearly proved the injurious nature of these measures, that he subsequently passed enactments for the punishment of drunkenness. These cheeks, notwithstanding, were far from proving effectual; and in the reign of Charles I. drunkenness prevailed to such an extent as to call for additional regulations for its suppression. During the period of the Commonwealth, drunkenness was the prevailing vice of the land; this indeed was so generally the case, that by other nations England was denominated "The Land of Drunkards." Intemperance, however, was strongly denounced at this period by Ministers of the Gospel, and by others, who viewed this degrading vice with detestation and alarm. There are several characteristic pamphlets, the production of their pious zeal, still extant, wherein the folly of drunkenness is forcibly portrayed, and the dreadful extent of its ravages exhibited.

* Historical description of the Island of Britain, Chap. xviii. Book 2.

† Vide Warton's Hist. of English Poetry, vol. iii.

* Baker's Chronicle.

† Camden's Annals, 1551.

But these efforts contributed very little to check its progress, and the vice, with all its attendant evils pursued its devastating course.

In the reign of William and Mary, drunkenness was very prevalent, and in fact was indirectly promoted by an Act, passed "for the encouragement of distillation," under the plea of benefiting the agricultural interests of the country. The pernicious consequences which ensued, and especially the alarming demoralization of the lower classes, soon induced the enactment of other laws for the restriction of the sale of intoxicating liquors. The celebrated De Foe has recorded some characteristic sketches of the intemperance of these times. "If the history of this well-bred vice," says he, "was to be written, it would plainly appear that it began among the gentry, and from them was handed down to the poorer sort, who still love to be like their betters. After the Restoration, when [drinking to] the king's health became the distinction between a 'Cavalier' and a 'Roundhead,' drunkenness began its reign, and it has reigned almost forty years. The gentry caressed the beastly vice at such a rate, that no companion, no servant, was thought proper unless he could bear a quantity of wine; and to this day it is added to the character of a man, when you would speak well of him, '*he is an honest drunken fellow*;' as if his drunkenness was a recommendation to his honesty. From the practice of this nasty faculty, our gentlemen have arrived to the teaching of it; and that it might be effectually preserved to the next age, have very early instructed the youth in it. Nay, so far has this custom prevailed, that the top of a gentlemanly entertainment has been to make his friend drunk; and the friend is so much reconciled to it, that he takes that for the effect of his kindness which he ought as much to be affronted at as if he had kicked him down stairs. Thus it is become a science; and but that instruction proves so easy, and the youth too apt to learn, possibly we might have had a college erected for it before now. The further perfection of this vice among the gentry will appear in two things, that it is become the subject of their glory, and the way of their expressing their joy for any public blessing. 'Jack,' said a gentleman of very high quality, when after the debate in the House of Lords, King William was voted into the vacant throne, '*Jack, go home to your Lady, and tell her we have got a Protestant King and Queen, and go make a bonfire as big as a house, and bid the butler make ye all drunk, ye dog.*' Here," continues De Foe, "was sacrificing to the devil for a thanksgiving to God."*

This remarkable writer concludes these observations as follows:—"Whoever gives himself the trouble to reflect on the custom of our gentlemen in their families, encourag-

ing and promoting this vice of drunkenness, among the poor, will not think it a scandal upon the gentry of England, if we say, that the mode of drinking as it is now practised, had its original from the practice of the country gentlemen, and they again from the court."

Gross scenes of intemperance were witnessed in the streets of London, during the visit of Christian IV., the King of Denmark, to his sister Anne of Denmark, Queen of England. The Danish King was well known for his love of strong drink, and the festivities held on the occasion were calculated to gratify the dissolute propensities of the northern monarch.

Sir John Harrington, in describing the debaucheries which attended this royal visit, in a letter written to Secretary Barlow, says, "She had women, and indeed wine too, of such plenty, as would have astonished each sober beholder. The Dane hath strangely wrought on our good English nobles; for those whom I never could get to taste good liquor, now follow the fashion and wallow in beastly delights. The ladies abandon their sobriety, and are seen to roll about in intoxication. The conduits in the streets ran with wine." Sir John Harrington concludes by remarking, "the gunpowder fright is got out of all our heads, and we are going on hereabouts, as if the devil was contriving every man should blow up himself, by wild riot, excess, and devastation of time and temperance—the Danes have again conquered the Britains, for I see no man, or woman either, that can now command himself or herself."*

In the eighteenth century ample testimony is on record to exhibit the awful ravages of drunkenness in Great Britain. The parliamentary debates which took place in consequence, afford us some interesting facts. Lord Cholmondeley informs us, that the consumption of French brandy, during the reign of Charles II., was very great. This excited discontent, from the idea that the nation experienced considerable loss from the want of encouragement to home distillation. Charles therefore was induced to grant permission to a company to distil brandy from wine and malt. After the revolution of 1688, when commerce with the French was interdicted, any person was permitted to set up a distillery, provided a notice of ten days was given to the excise.† This encouragement to distillation was a few years afterwards patronized and perpetuated by William, and increased to a considerable extent the consumption of home-made spirits. In London and Westminster in particular, the trade was prosecuted with much success. The legislature held out the same encouragement to this traffic, during the reign of George I. The

* De Foe's "Poor Man's Plea."

* Nugæ Antiquæ, vol. 1

† Parliamentary History, vol. 12, p. 1213.

distillers became more expert in their business, and, by this and other means, were enabled to dispose of the produce of their stills at so cheap a rate, that the populace were induced to indulge in the most extravagant excess. No wonder then that health, morals, and industry, were at a low ebb. National ruin and degradation appeared inevitable, and the legislature, in alarm and despair, placed such a duty on spirits, in addition to a heavy sum on taking out a license, as was tantamount to a prohibition of its retail sale in a legitimate and public manner. The appetite for strong drink, however, was too deeply rooted—immense quantities of spirits were illicitly sold by some, while others evaded the law by retailing a kind of spirit which was, in derision, called, “Parliament Brandy.”

This injudicious enactment, passed 2 Geo. II., was found to be ineffectual in its operation, and accordingly in the sixth year of the same reign was totally repealed, “without making any regulation for preventing the excessive use of such liquors.” Lord Cholmondeley describes this measure as very injurious in its results. The poor, he says, being restored to their liberty of getting drunk as usual, like men set free from a gaol, made a most extravagant use of that liberty. Lord Cartaret and Lord Cholmondeley observed, that on their way to the house they had witnessed persons lying insensible in the gutters, from the effect of strong drink. The cost of gin at this period was 6*d.* per quart. The legislature now became more determined than ever in its resolves to put an end to the traffic; in consequence of which an Act was passed in the ninth year of George II., which, in effect, absolutely prohibited the retail of spirituous liquors.

Perhaps no circumstance is more illustrative of the intemperance of these times than the disgusting manner in which the sellers of these poisonous liquors endeavoured to extend their trade. A contemporary publication has inserted the following notice for the year 1736. “We have observed some signs where such liquors are retailed, with the following inscription,—‘*Drunk for a penny, dead drunk for two-pence, clean straw for nothing.*’”* Smollet makes the following remark upon this subject:—“They accordingly provided cellars and places strewed with straw, to which they conveyed those wretches who were overwhelmed with intoxication: in those dismal caverns they lay until they recovered some use of their faculties, and then they had recourse to the same mischievous potion; thus consuming their health and ruining their families, in hideous receptacles of the most filthy vice, resounding with riot, execration, and blasphemy.”†

The host of petitions which were sent in from various parts of the kingdom, at length induced the government to pass more restrictive measures, which had some effect in reducing the consumption of these liquors; but the appetite for them had been created, and to the present day this unhappy country is still groaning under a torrent of evils originating in the same cause.

The excitement produced by this obnoxious measure in various parts of the country, was such as to induce the proper authorities to take active steps to suppress all popular tumults. The Bill came in force on September 29th, 1736. On that day the populace at Norwich, Bristol, as well as London, and other places, with the view duly to honour the “death of Madame Gin,” made a formal procession at her “funeral,” on which occasion some of her devoted admirers of both sexes got drunk, but fortunately committed no further outrage.

The distillers, as might be supposed, were much perplexed. Some took out licenses to sell wine, others prepared to embark in the brewing trade, while not a few offered for sale a liquor composed of wine in which spices were infused. Lord Cholmondeley says, “the very commencement of the law exposed us to the charge of Rebellion: an insurrection of the populace was threatened—nay, the government had information of its being actually designed, and very wisely commanded the troops to be ordered out and paraded in the several places where the mob was likely to assemble, which, perhaps, prevented a great deal of bloodshed.” The same statesman tells us that the informers, who, as might be expected, were objects of public detestation, were hunted down like wild beasts. Respectable dealers soon abandoned the proscribed traffic, and the trade soon fell into the hands of disreputable men, who were fearless of the legislature and set at nought its enactments.

“Within two years of the passing of the Act,” remarks Tindal, “it had become odious and contemptible, and policy, as well as humanity, forced the commissioners of excise to mitigate its penalties.* This writer further informs us, that during these two years no less than 12,000 individuals were convicted of offences connected with the traffic.† Lord Cholmondeley states, that at this period, in defiance of the exertions of government, no less than seven millions of gallons and upwards were consumed in London and adjacent districts.

One popular mode of evasion was as follows:—Drams were sold in the brandy shops, under the following and other quaint appellations, “Sangree,” “Tom Row,” “Cuckold’s Comfort,” “Parliament Gin,”

* Parliamentary History, vol. xii. p. 1213.

† Smollet’s Hist. of England, *passim*.

* Continuation of Rapin. Vol. viii. p. 358. Ed. 1759.

† Ibid. Vol. viii. p. 388.

“Bob,” “Make Shift,” “The Last Shift,” “The Ladies Delight,” “The Balk,” “King Theodore of Corsica,” “Cholick and Gripe Waters.”

The government soon abandoned this fruitless and unequal struggle. In 1743 some modifications of the obnoxious law were made, and in 1751 measures were adopted which, to a great extent at least, if not altogether, put a stop to the smuggling which had previously prevailed on an extensive scale. This illicit traffic, in fact, was rendered no longer a source of emolument. In 1734 the quantity of “Low wines,” distilled from malted corn was 8,241,982 gallons. In 1750 the excise returns exhibit an increase to 11,200,000 gallons. The enactments of 1751 at once reduced the amount to 7,022,000 gallons. An average moreover of twenty-two years ending 1782, during which time “the population and wealth of the country had been rapidly increasing,”* shows the quantity of “low wines,” annually distilled, to have been reduced to 3,710,762 gallons.†

V. Examples might be adduced in evidence of the existence of gross intemperance at various times, in the Scottish nation. In its early history, many of the national habits and customs bear a great similarity to those of the Ancient Britons. A respectable author thus describes the mode in which their drinking feasts were conducted. “The manner of drinking used by the chief men of the Isles, is called in their language, “streak,” that is, a round; for the company sat in a circle: the cup bearer filled the drink round to them, and all was drunk out, whatever the liquor was, whether strong or weak. They continued drinking sometimes twenty-four, sometimes forty-eight, hours. It was reckoned a piece of manhood to drink until they became drunk; and there were two men attending punctually with a barrow on such occasions. They stood at the door until some became drunk, and they carried them upon the barrow to bed, and returned again to their post, as long as any continued; and so carried off the whole company, one by one, as they became drunk.”‡

In the sixteenth century, the hospitality of the Scots induced them to indulge in excessive drinking. Moryson, who travelled in Scotland in 1598, speaks of the courtiers, merchants, and country gentlemen, as much given to intemperance. “I did never hear,” says this writer, “that they have any public inns, with signs hanging out, but the better sort of citizens brew ale, their usual drink, (which will distemper a strangers’ body) and the same citizens will entertain passengers upon acquaintance or entreaty.” “When passengers go to bed, their custom

was to present them with a sleeping cup of wine at parting. The country-people and merchants used to drink largely, the gentlemen somewhat more sparingly; yet the very courtiers, at feasts by night-meetings, and entertaining any stranger, used to drink healths not without excess; and to speak truth without offence, the excess of drinking was then far more general among the Scots than among the English. Myself being at the court, invited by some gentlemen to supper, and being forewarned to fear this excess, would not promise to sup with them but upon condition that my inviter would be my protection from large drinking, which I was many times forced to invoke, being courteously entertained, and much provoked to carousing, and so for that time avoided any great intemperance. Remembering this, and having since observed in my conversation at the English with the Scots of the better sort, that they spent great part of the night in drinking, not only wine but even beer; as myself will not accuse them of great intemperance, so I cannot altogether free them from the imputation of excess, wherewith the popular voice chargeth them.”

In the middle of the eighteenth century, excessive drinking was extremely prevalent among the higher classes of Scotland. The more humble portion of society, was not at that period addicted to the free use of intoxicating liquors. Mr. Dunlop relates, that the then member of parliament for Renfrewshire, was accustomed to drink ardent spirits at a small ferry-house, for three weeks together; and that a dispute having taken place at a fair in Ayrshire, the parties went to the mansion of a neighbouring magistrate, to seek an adjustment of their differences, when they found three Justices of the Peace dancing naked, before the door, in a state of intoxication. These were three of the principal men of the county. Similar stories, remarks Mr. Dunlop, are to be found in every parish in Scotland, indicative of the inebriation of the upper ranks during the last century.*

It may readily be supposed, that so injurious an example had a corresponding influence on the humbler classes of society; and more recent history displays incalculable injury thereby resulting to the morals, health and happiness, of that country.

Dr. Cleland, in his *Statistic of Glasgow*, states, that in 1830 the proportion of spirit-shops in the city of Glasgow, was *one to every fourteenth family*. The same respectable authority adds, that if we take into consideration the number of persons who retail spirituous liquors without a license, together with the number of temperate families who never use a public-house, “there is at least one place where spirits are retailed, for every twelve families.” It is stated, on undeniable evidence, that in

* Inquiry, &c. into Spirituous Liquors, p. 18.

† Report of Commiss. of Excise on Corn Distillation, 1781.

‡ Martin’s Description of the Western Islands, p. 196.

* Parliamentary Evidence, p. 408.

one parish in Scotland, *the amount lately expended in the purchase of spirits, exceeded its whole annual rental.*

VI. The use of spirituous liquors seems to have obtained in Ireland at an early period. A native writer informs us, that "the English, who came with Henry II., admired the habit of copious potations to which our ancestors were addicted, and to which we, their descendants, yet adhere with hereditary attachment,"* Campion informs us, that in his time, the Irish "used ordinary drink of *aqua vite*," for certain complaints which they were pleased to attribute to the climate, and which, he afterwards adds, "they will swill by *quarts* and *pottles*."†

During the eighteenth century, the most dreadful consequences resulted from the introduction of ardent spirits into general use. The government soon had reason deeply to lament the encouragement which it had given to distillation. Several laws were passed with the intent of restricting the use of ardent spirits; but the taste for such stimulants had been created, and illegal means of obtaining them were extensively resorted to.

Walsh and Whitelaw state, that in 1798, in one street in Dublin, which contained 190 houses, no less than fifty-two were licensed to vend raw spirits; a poison, they further add, productive of vice, riot, and disease; hostile to all habits of decency, honesty, and industry; and, in short, destructive to the souls and bodies of our fellow-creatures.‡ In 1826, according to accurate calculations, the quantity of whiskey consumed in Ireland would not be less than 17,000,000 gallons, equal to a consumption of two one-third gallons by every man, woman, and child, of the population.¶

Ireland has, for the last century, witnessed insubordination, crimes and immorality, raging to an almost incredible extent, most of which may be attributed to the influence of intemperance. It is a subject of warm gratulation that a brighter day has now dawned upon that interesting nation.

VII. The history of other countries shows, that intemperance is not peculiar to Great Britain and Ireland. The inhabitants of many countries in a semi-barbarous state, previous to their connexion with the Christian world, had discovered the art of producing intoxicating substances, in various ways. Others learned the habit of inebriation from European nations, who at the same time supplied them with these pernicious articles for consumption. All of them, have more or less experienced the dreadful evils which result from intemperate habits.

The Nubians, are described by Burek-

hardt, as excessively addicted to drunkenness, and during his abode at Berber, in 1816, several quarrels occurred from intemperance, most of which ended in the shedding of blood.*

The inhabitants of Ashantee, Congo, and other African nations, are described by travellers as indulging freely in the use of strong drink, for which they are doubtless more or less indebted to their intercourse with European nations; and, especially to their accursed trade in human flesh.†

In the Nicobar Islands, the natives drink freely of Arrack at their feasts; and in general, until their sight is gone, and they are completely stupified.

The Otaheitans indulge freely in an intoxicating liquor called Ava, prepared in a peculiar manner from the expressed juice of a plant Cook, and other writers, feelingly describe the injurious effects of this deleterious liquid, upon the morals and health of these tribes.‡

The natives of New South Wales, have suffered greatly from the use of ardent spirits. It is to be lamented, that the inhumanity of professing Christians, has sanctioned and promoted the introduction of strong drink into that interesting colony, where scenes of bloodshed are of frequent occurrence amongst the natives, when in a state of inebriation. "Scarcely," says Arago, "do the intoxicating fumes get into their heads, when they breathe nothing but battle, and shout forth their war cries. Impatient for murder, they seek antagonists, provoke them by ferocious songs, and demand death in the hope of inflicting it. They find but too readily the opportunities they provoke; and their 'war-whoop' is answered by whooping not less terrible. Then the combatants, drawn up in two lines, perhaps twenty steps from each other, threaten mutually with their long and pointed spears, launch them at their adversaries, with wonderful strength and dexterity, and, finally attack each other with ponderous and formidable clubs. Limbs are fractured, bones smashed, skulls laid open, no exclamation of pain escapes from these ferocious savages; the air resounds only with frightful vociferations. He who falls without having found a victim, dies rather from despair than from the hurts he has received; and the warrior who has laid low a few enemies soon expires without regretting the loss of life."¶

VIII. Among the American savages, the free use of intoxicating liquors has produced dreadful ravages. The French found this practice of advantage in their trading transactions.

Charlevoix, in his account of Canada, describes some awful scenes which he witnessed in that part of America,—“One

* Morewood's Essay on Inebriating Liquors, p. 335. Ed. 1824.

† Campion's Hist. Ireland, p. 13. Ed. 1809.

‡ History of Dublin, vol. 1 p. 646. Ed. 1818.

¶ Inquiry into the Use of Spirituous Liquors, p. 1. Ed. 1850.

* Burekhardt's Travels in Nubia, 4to. pp. 143-4.

† Voyage to Congo. Part I, p. 564, apud Churchill. Bowdich's Ashantee, p. 355.

‡ Cook's Voyage, vol. 1 p. 359.

¶ Arago's Voyage

sees even in the streets and squares of Montreal, the most frightful spectacles, the certain consequences of the drunkenness of these barbarians; husbands and wives, fathers, mothers, and their children; brothers, and sisters, taking each other by the throat—tearing off each others ears—and biting one another like furious wolves.”

This writer says, that the Europeans when they settled in North America, soon found that supplying the natives with spirituous liquors, promoted their trading interests, by making them incapable of attending to business, so “they waged a war,” he remarks “of gin and brandy against the various tribes, some of which have been subdued, and others almost wholly extirpated by their own drunkenness.”*

The Rev. Mr. Andrews thus describes the effects of intoxicating liquor upon the Mohawk Indians. “They grow quite mad, burn their own little huts, murder their wives and children, or one another, so that their wives are forced to hide their guns and hatchets, and themselves too, for fear of mischief.”†

Among the American savages, when any business of importance is transacted, they appoint a feast, of which almost the whole tribe partakes.

The Brazilian savages differ very little in this respect from their brethren in the North. When they hold a feast they proceed from house to house, consuming the liquor until they become quite infuriated, and in this state commit the most dreadful excesses. Speaking of Chili, Raynal says, “The natives had, like most savages, become excessively fond of spirituous liquors, and when intoxicated, used to take up arms, massacre all the Spaniards they met with, and ravage the country near their dwellings.”‡ After 1724 the Spaniards very wisely prohibited the use of brandy and other spirituous liquors in Chili. The settlers in Georgia passed a similar enactment. In 1734 was passed “an Act to prevent the importation of rum and brandy in the province of Georgia, or of any kind of spirits, or strong waters, whatever.”||

Similar practices are found among the Araucano Indians in South America. A recent observer says: “On their great feasts they drink large quantities of a very intoxicating liquor, called Chicha, made from maize, which they sow for this purpose, although no other signs of agricultural cultivation are to be found among them. The elder females of the tribe prepare this beverage by chewing the maize, which they afterwards collect in a trough resembling a canoe, and having added a sufficient quantity of water

to the masticated roots, leave it to ferment, covering the trough carefully with mats. Previous to these feasts, which end in premeditated intoxication, they voluntarily surrender their spears and knives to the women, who secrete them in the woods, as they are conscious of their propensity to quarrelling and fighting when excited by liquor. A guard is always appointed from among the warriors, who retain their weapons, and taste no chicha until the next day. On particular occasions of rejoicing they drink this beverage mingled with horse’s blood, which they believe endows them with preternatural strength and agility.”*

IX. The Russians are very much addicted to the free use of ardent spirits. Brandy is their favourite liquor. Distillation is encouraged by the Government of that country, and forms a fruitful source of revenue. Morewood† calculates its annual consumption at 5,500,000 vedros,‡ or 27,500,000 gallons. The same author relates, that in one province and the adjoining districts, called Penza, there are no less than 397 stills at work, which are wrought by 982 men.

The natives of Kamschatka are exceedingly attached to inebriating liquors, and traders frequently tempt them to part with valuable sables and other furs for small quantities of brandy. This infamous practice has been successfully adopted by designing and avaricious individuals.

The Laplanders are also much attached to intoxicating drinks; indeed, so much so, that they have been known to exchange their valuable animals for small quantities of spirits. The habit of drinking is also associated with many of their social customs, and is of course productive of most injurious consequences both to themselves and their families.

In 1789 the licenses to inns and taverns yielded £1,708,338. The brandy sold at that period in the cities of Petersburg, Moscow, and adjacent parts, amounted to 3,320,000 rubles per annum. In the city of Moscow alone, there were 4000 kabaks or shops for the retail of brandy. Took, some years ago, estimated the amount of revenue arising from the sale of brandy in Russia, at from 8,000,000 to 9,000,000 of rubles.

In Sweden, described by Dr. Edward Clarke as a temperate nation, and according to the same writer, favoured with the most virtuous peasantry in Europe, there is consumed a larger proportion of ardent spirits than in any other division of the globe possessed of the same population. This may in a great measure be attributed to the injurious patronage of the sale of these pernicious compounds by the government of

* Charlevoix Hist. of North America, vol. i. p. 305.

† Pinkerton’s Voyages, vol. xii. p. 415.

‡ Raynal’s Hist. of East and West Indies, London, 1788, vol. iv. p. 209.

|| Hist. Settlement of Georgia, London, 1755.

* Campaigns and Cruises in Venezuela and New Granada, p. 391.

† Morewood’s Essay on Intoxicating Liquors, p. 248.

‡ Vedro, a measure containing from 15 to 20 quarts.

that country, about the latter part of the last century. It is stated that not more than forty years ago the Swedish people consumed only 5,000,000 of bottles of brandy, whereas of late years, 22,000,000 are scarcely sufficient for their annual consumption.

Colonel Foreel, a good authority on this subject, in a communication made by him to the Reverend Robert Baird, about the year 1836, states that the number of kans (one kan and a half is nearly equal to one of our gallons) of whiskey at that period annually made in Sweden, was not less than *sixty millions*, or nearly 40,000,000 of gallons. The number of distillers then in operation was about 150,000. Almost every chief farmer, it further appears, had his own distillery. The Diet of the kingdom in 1840 appointed a committee to investigate this subject. From their Report it appears that the number of distilleries had decreased to about 125,000. This decrease, however, did not bring with it a corresponding decrease in the amount manufactured, because although the establishment and operations of Temperance Societies had been productive of much good, yet the invention of new processes of manufacturing whiskey, and a greater concentration of business sufficiently account for this otherwise contradictory result. The consumption in 1839, according to official report, was not much short of 80,000,000 of kans, or about 50,000,000 of our gallons.

In Prussia 60,000,000 of thalers (nine millions of pounds) are annually expended in brandy. The population amounts to about 15,000,000 of inhabitants. The annual consumption of brandy is 240,000,000 quarts, equal to the same amount of English pints. In Berlin, which contains about 250,000 inhabitants, there are 25 beer-sellers, 86 coffee-houses where spirits and beer are sold, 150 distillers, 200 retail wine-sellers, 150 wine merchants, and 148 coopers, while the eating-houses only amount to 120, bakers 220, and butchers 350.

XI. The progress and effects of distillation form a prominent feature in the history of the United States. The quantity of spirits distilled from grain and fruit in 1801, was estimated at 10,000,000 of gallons. In 1810 this amount exceeded 20,000,000 of gallons. In the same year, in Pennsylvania alone, there were 3,334 distilleries, which produced no less than 6,552,284 gallons of spirits, the principal part of which was distilled from grain. The Hon. Timothy Pitkin, in his Statistics of the United States, estimates the consumption in that country in 1810 as 31,725,417 gallons, which, according to the same authority, amounted to about *four and a-half gallons for each individual*.*

On a careful investigation into the amount sold by retail in several towns in New England, it appears that in 1810 10,000 gallons

were consumed among a population of 1,500. On the supposition, however, that the habits of the people generally were the same as in 1810, and estimating the population of the United States at 12,000,000, the annual consumption would amount to 56,000,000 of gallons, the value of which, at 50 cents the gallon, would be 28,000,000 of dollars.*

The number of distilleries in the United States in 1815 was 15,000. The manufacture of spirits, however, gradually increased until about 1829, when it attained its maximum. At that period, the temperance reformation began to exercise its salutary influence, and, as a consequence of its success, there has ever since been a rapid diminution in the importation, manufacture, and consumption of the deadly product of the still.

XII. The consumption of inebriating liquors in wine countries, and its effects on the morals and health of the population, has of late years excited considerable discussion. The statistics of this subject, are, however, imperfect and unsatisfactory. A respectable writer informs us, that in 1789, and for twenty years preceding, the average annual quantity of wine consumed in Paris alone was 20,292,500 gallons.†

M. Lavoisier states in an official document, that in 1819 the consumption in Paris was 281,000 muids of wine and brandy, and of cider and beer, 18,928,000 bottles. In 1819, Paris received 801,524 hectolitres of wine, or 20,038,100 gallons.‡ In 1829, the consumption of wine which paid duty was 396,139 hectolitres, 22,403,407 gallons. The consumption of other liquors, 151,664 hectolitres, or 3,591,600 gallons.§ Bushby informs us that the wines sent to Paris receive an addition of 7½ to 10 per cent. of brandy.¶ This practice enables the people of Paris at pleasure to reduce the strength of the wine by admixture with water, by which means they diminish the amount of municipal duty levied on wines.

The annual production of wine in France amounts to not less than 893 millions of wine gallons. Deduct from this, one-seventh for distillation, and 20,000,000 gallons for exportation, and 746,571,429 gallons remain for home consumption. The brandy distilled is estimated at 11,745,425 gallons; spirits extracted from other materials than the grape, 2,250,000 gallons; cider, 221,705,450 gallons; beer, 74,025,450 gallons.¶ This forms an aggregate of 309,726,425 gallons, exclusive of wine, from which we must deduct 2,500,000 gallons for exportation, which leaves 307,226,425 gallons for consumption.

* Statistics of the United States, 1816.

† Arthur Young's Travels.

‡ Bulwer's France, vol. i.

§ *Annuaire pour* 1831, p. 87.

¶ Bushby's Visit to the Vineyards of France and Spain, 1831, p. 79.

* Murray's Encycloped. of Geography, Vol. i, p. 340

* Statistics of the United States, 1816, pp. 101.

The following interesting and valuable Table is drawn up by R. M. HARTLEY, Esq., of New York. This writer estimates the strength of French Wine at fifteen per cent of Alcohol by measure. Brande's Analysis of seventy specimens of Wine gives an average of 20,05 of Alcohol. The reader may readily form his own estimate by a reference to the Table of that distinguished Chemist.

A TABLE
Showing the Annual Consumption and Value of Intoxicating Liquors in different Countries, the Proportion to each Inhabitant, and the Aggregate of the Alcohol consumed in each Country.

COUNTRY.	Gallons.	Aggregate consumption.	Average to each individual.	Per cent. of alcohol by measure.	Gallons of alcohol.	Aggregate consumption alcohol.	Population.	Average of alcohol to each inhabitant	Value.
France, consumption of Wine.....	746,571,429			Wine 15 per cent.	111,985,494				
Brandy	9,245,425			53	4,900,065				£52,777,777, or
Spirits	2,250,000	1053,797,854	32½ gallons	53	1,192,500	137,298,677	32,000,000	About 4½ gallons. }	£234,333,329 83
Cider	221,705,450			7	15,319,381				
Beer	74,025,550			5	3,701,227				
(a) Great Britain, consumption of all } sorts on which duty was paid in 1831 }	31,402,417			Spirits 53	16,643,281				
(b) Small Beer do. annual } average for five years preceding 1831 }	54,822,412	284,041,952	11½ gallons	Small Beer 1·25	685,280	28,474,021	25,000,000	About 1½ gallons. }	£39,692,187, or
Do. Strong Beer	189,977,152			5	9,498,857				£13,500,000, or
Wine imported in do. 1835	7,840,971			Wine 21	1,646,603				£59,940,000 00
(c) Sweden do. Spirits	22,500,000	22,500,000	7 gallons	53	11,925,000	11,925,000	3,000,000	About 3¾ gallons. }	£9,000,000, or
Prussia do. Spirits	30,000,000	30,000,000	2 gallons	53	15,900,000	15,090,000	15,000,000	About 1 1-16 do. }	£39,960,000 00
United States do. Domestic Spirits.....	40,000,000			53	21,200,000				
(d) Foreign	2,672,228			Spirits 53	1,415,280				£8,062,416, or
(e) Wine	5,951,954			21	1,249,910				£35,797,127 05
Beer	10,000,000	80,624,182	4¾ gallons	Wine 21	50,000	23,999,190	17,000,000	About 1½ gallons. }	
Cider	12,000,000			Beer 5	84,000				
				Cider 7					

(a) Morewood's History, &c., p. 707.
(b) Idem, p. 724, vide McCulloek's Statistical Account of the British Empire, vol. i. p. 726.

(c) British Temperance Society Report, 1839, p. 93, et seq.
(d) Report of the Secretary of the Treasury, 1837.
(e) Idem Report. (f) Dollars.

SECTION IV.

THE HISTORY OF INTEMPERANCE IN CONNEXION WITH THE PROFESSION OF RELIGION, AND ITS EFFECTS ON RELIGIOUS WELFARE.

“Woe to them that are at ease in Zion, that drink wine in bowls, and anoint themselves with the chief ointments: but they are not grieved for the affliction of Joseph.”—AMOS vi. 1, 6.

“But they also have erred through wine, and through strong drink are out of the way; the priest and the prophet have erred through strong drink, they are swallowed up of wine, they are out of the way through strong drink; they err in vision, they stumble in judgment.”—ISAIAH xxviii. 7.

Introductory Remarks.—I. Intemperance in connexion with the religious ceremonies of the heathens.—II. Intemperance in connexion with the Jewish Church.—III. Intemperance as associated with the profession of Christianity.—1. The language of the New Testament.—2. Intemperance in some of the early centuries.—3. The Anglo-Saxon, French and English.—4. Intemperance at church, and of the feasts in various countries in connexion with the Roman Catholic Church.—5. Drunkenness at festivals more or less associated with the Reformed Church.—IV. The use of intoxicating liquors an obstacle to Missionary exertion.—V. The use of inebriating liquors an antagonist to the Gospel at home.—1. In its effects on Christian churches, and in particular reference to ministerial usefulness.—2. In its effects, in various other ways, in preventing the progress of religion.

EVERY thing which has connexion with the sanetity of religion possesses peculiar importance. Hence arises the necessity of separating from its profession all practices not sanctioned by Divine authority, but associated with its various ordinances by the vitiated habits of degenerate times. No practice has been more intimately connected with the ordinances of religion, in all ages of the world, than the use of strong drink.

It is intended, in this stage of our inquiry, to ascertain the origin and progress of this custom, and its consequences in relation to religious welfare. In the course of this investigation, some singular elucidations will transpire as to the drinking habits both of Heathen and Christian nations, between which, a remarkable similarity will be found to exist.

I. Intemperance in connexion with the Religious Ceremonies of the Heathens.

The religious rites and ceremonies of the ancient Heathens contributed greatly to foster the vice of intemperance. The numerous festivals held by these nations, formed a fruitful source of temptation to this sin. Athenæus informs us, that all their luxurious entertainments were occasioned by devotion to the gods, *Πᾶσα συμπόσιον συναγωγή τὴν αἰτίαν εἰς θεὸν ἀνέφερε.**

These religious festivals were at first conducted with temperance and decorum, except when they were desirous to make special acknowledgment for some signal mark of

divine favour. On such occasions they indulged freely in wine, for which reason the feast was called *Θοῖναι*, because they imagined they were obliged at those times *to be drunk in honour of the gods!* *ὅτι διὰ τοὺς θεοὺς οἰνοῦσθαι δεῖν ὑπελάμβανον.*

The most important of these festivals was the one held at the conclusion of the vintage, or gathering in of the grapes. At this time they were accustomed to drink with freedom, esteeming it as an honourable offering of the first fruits to the gods. *Seleucus*, in *Aristotle*, tells us that the words *θαλία* and *μέθμ* were similarly derived. *Τὸν τε οἶνον ἐπὶ πλεῖον καὶ τὴν ἑλληνὴν ἡδονπάθειαν θεῶν ἕνεκα προσφέρεισθαι, διδὼ καὶ θοῖνας καὶ θαλίας καὶ μέθας ὠνομασθῆναι; i. e. banquets were called θοῖναι, θαλῖαι, and μέθαι, from Θεός, or God; because it was usual at those times to consume great quantities of wine and other provisions, in honour of the gods.**

These profane notions were but too much in unison with the inclinations of the people, among whom they obtained. The frugality with which their more ancient festivals had been conducted, gradually disappeared. As the heathens increased the number of their gods, so did they extend the number of their festivals, until, in progress of time, these originally solemn occasions were regarded as privileged opportunities of sensual indulgence. Such festivals were more or less in use among all the heathen nations. *Strabo* informs us, that “the practice was common both to Greeks and barbarians.”

Amongst the most numerous of these festive occasions were those held in honour of *BACCHUS, the God of Wine*. At Athens, the very focus of heathen wisdom and idolatrous abominations, the bacchanalian orgies were celebrated with great splendour, and in particular those which were denominated *Dionysia*. Some idea may be formed of the estimation in which they were held, when it is known that the archons, or chief magistrates, patronized the proceedings, and had a share in their management. During the processions, which were always held on these occasions, various ceremonies were performed, in the course of which the grotesque gestures of the drunkard were imitated. These proceedings invariably closed with the most disgusting, drunken, and licentious scenes of degrading debauchery. *Plato* informs us, that he witnessed the whole of the city of Athens drunk, during the Bacchic festivals.†

The ancients erected statues in honour of *Bacchus*, who was frequently represented as an effeminate young man, in allusion to the joyous feasts which were held in honour of him; and at other times, as an old man, from the effect of vinous liquors in bringing on premature old age.

The Greeks had many festivals in honour of this god. Those called *Anthesteria*

* Athenæus. lib. 5.

* Potter's Grecian Antiquities, vol. i. p. 418.

† Plato, lib. i. *de leg.*

continued three days, during which time drunkenness greatly prevailed; indeed, rewards were held out as inducements to intemperate drinking.

Similar festivals were held among the Romans, and ultimately became the most common source of intemperance and immorality. The impurities, however, connected with these proceedings, and the consequent demoralization of the people, were so obvious in their character, and so debasing in their effects, that the senate was constrained to interfere, and to put a stop to their continuance. These festivals were celebrated by not less than seven thousand souls of both sexes, promiscuously arranged, and were invariably held in the darkness of the night.

Among other licentious festivals of the Ancients, were those of Cotytro, the goddess of debauchery, and from thence called Cotyttria. They were principally celebrated by the Athenians, Thracians, and Corinthians. Intemperance, with gross debauchery, always characterized the solemnities.

Similar practices existed at the festivals held in honour of *Comus*, the god of feasting and revelry. This deity was usually represented as a young man, in a state of intoxication, and crowned with the drunkard's garland.

The Persians also had festivals of a similar description. One of the principal of these was held in honour of *Anaitis*, an Armenian goddess. Both sexes assisted at this ceremony, and inebriated themselves to such a degree, that the whole was concluded by a scene of the greatest lasciviousness and intemperance.* Orgies, worthy of the deities to whose worship they were consecrated, and for whose honour they were instituted.

The evil of intemperance, as it existed among the heathens, presents many deplorable features, but how much more is it to be lamented when found to prevail among a people possessed of superior light and instruction. The Church of the true God, in all ages, will be found to have suffered severely from the influence of strong drink. A view of its records but too evidently demonstrates the truth of this statement.

II. *Intemperance in connexion with the Jewish Church.*

The Jews, at various times, manifested considerable religious declension, and followed idolatrous practices. The reasons for this dereliction were various; but among other causes, intemperate indulgence occupies a most prominent place. The circumstances which occurred at the time when Moses was on the Mount, in conference with the Almighty, strikingly exhibit the association of idolatry with intemperance. When Moses delayed his return, the Israelites made for themselves false gods, and prepared

a feast of suitable offerings for idolatrous worship. The consequences were shortly afterwards seen. "The people sat down to eat and drink, and rose up to play."* When Moses, at a subsequent period, gives to the Children of Israel the Commandments, which he had received on Mount Sinai, he strongly exhorts them to obedience to those laws, and, at the same time, faithfully warns them against sensual temptations, when they should become possessed of the country which the Lord had promised them. After enumerating the advantages they would thereby obtain in securing the possession of lands and cities, houses and wells, vineyards and olive-yards, for which they had not laboured, Moses exhorts them when they had eaten and were full, then to beware lest they forget the Lord.† The wise legislator had previously witnessed the awful effects of sensuality in turning the heart from God. The consequences of intercourse with surrounding nations, whose practices were highly sensual and ensnaring, formed another source of anxious alarm.‡ As if these allusions and exhortations, however, were not sufficiently powerful, Moses soon afterwards repeats his warning, "Lest when thou hast eaten and art full, then thine heart be lifted up, and thou forget the Lord."§ Shortly after this event, he bewails the stubbornness of the people, and expresses his prophetic fears of the consequences of indulgence. "For when they have eaten and filled themselves, and waxen fat, then will they turn unto other gods and serve them, and provoke me, and break my covenant."¶ These warnings were verified at an early period; for in the succeeding chapter, Moses alludes to the departure of the luxurious Israelites from the worship of the true God. "But Jeshurun (Israel) waxed fat and kicked; then he forsook God which made him, and lightly esteemed the Rock of his Salvation."‡

In succeeding centuries, sensual indulgence was found to be highly inimical to the religious welfare of the Jews. The prophets of the Most High allude to this circumstance in terms of strong disapprobation. Even the Holy Sanctuary did not escape its contaminating influence. "And they drink the wine of the condemned in the house of their God."** Few examples more forcibly depict the intemperance of those times, and the evil effects of strong drink on the conduct of some of the chosen people of God, than the fact that the Nazarites were tempted to indulge in wine by the posterity of Israel. The Nazarites were a people specially devoted to the Lord, and scrupulous in abstaining from the use of wine. "And I raised up your sons (that is of Israel) for prophets, and of your young men for

* Lempriere Bibliotheca Classica.

* Exodus xxxii. 6. † Deut. vi. 11, 12.

‡ Deut. xiv. and following chap.

§ Idem, viii. 10-13. ¶ Idem, xxxi. 20.

‡ Idem, xxxii. 15. ** Amos. ii. 8.

Nazarites. Is it not even thus, O ye children of Israel, saith the Lord. But ye gave the Nazarites wine to drink, and commanded the prophets, saying prophesy not."*

The same inspired writer subsequently characterizes, in decisive language, some of the distinguishing traits of intemperance; and, in particular, the selfish feelings and disregard of religion which the habit induces. He pronounces woe against them that are at "*ease in Zion*,"—"that put away the evil day and cause the seat of violence to come near; that drink wine in bowls, and anoint themselves with the chief ointments: but are not grieved for the affliction of Joseph."†

The Prophet Hosea adverts to the effects of luxury in turning the heart from God. "The children of Israel look to other gods, and love flagons of wine." Idolatry is constantly associated with satiety and intemperance. "Ephraim is joined to idols; let him alone. Their drink is sour, they have committed whoredom (towards God) continually."‡

The Prophet Isaiah frequently bewails the luxury and intemperance of the times in which he lived, and their effects on religious prosperity. In reference to the feasts of the intemperate, he expressly declares, that they "*regard not the word of the Lord, neither consider the operation of his hands*." "Therefore," he immediately adds, "my people are gone into captivity, because they have no knowledge; and hell hath enlarged herself."||

At a later period intemperance prevailed to an alarming extent among the Jews; and in particular among the inhabitants of Ephraim. "Woe to the crown of pride, to the drunkards of Ephraim."§ This fearful vice extended even to the expounders of the word of God. The priests and prophets, against whose indulgence in strong drink there were strict laws, participated in the general declension of the times. "The priest and prophet have erred through strong drink; they err in vision, they stumble in judgment."¶

Under these degrading circumstances, well might the prophet Isaiah exclaim, "Whom shall he teach knowledge, and whom shall he make to understand doctrine?" The infatuated people had "made a covenant with death," and "with hell were in agreement," and had flattered themselves that their conduct would escape the judgment of a just God.**

Hosea, in reference to the wickedness of the Ephraimites, feelingly exclaims, "I did know thee in the wilderness, in the land of great drought. According to their pasture, so were they filled, they were filled, and

their heart was exalted, therefore have they forgotten me."*

These examples of irreligion and intemperance, present fearful warnings to future generations against sensual indulgence. The hearts of men are naturally obstinate and disobedient; but when under the influence of foreign excitement, they become doubly careless as to future consequences. The children of Israel indulged freely in sensual pleasures, and so were estranged from God. Their illustrious king Agur, evidently felt, and strongly inculcated the importance of exercising proper control over the appetites, when he exclaimed, "Feed me with food convenient for me; lest I be full and deny thee, and say, Who is the Lord?"†

The preceding observations lead us to conclude, that at certain periods, intemperance prevailed to a greater or less extent among the Jews. There is no evidence, however, to prove, that *at any period* this degrading vice even approached to the same extent to which it has been carried in the present day. On the contrary, the Jews, considered as a nation, were in general *temperate* in their habits. Drunkenness was regarded with great abhorrence, and in the earlier periods of their commonwealth, severe laws were enacted against it. It was this feeling which caused the prophets to utter such strong and pointed denunciations against it, though the language of these men of God appears, in many instances, to be directed, in terms the most forcible, against the vice itself, as practised amongst a few, and not in relation to a custom to which the people were generally addicted. If the disapprobation of the Almighty was so strongly excited at the partial intemperance of those times, what would be the language of the prophets had they lived to witness the almost general habits of drunkenness which prevail among professing "Christians" in the present day?

III. *Intemperance as associated with the profession of Christianity, and in connexion with Christian Churches.*

1. In the New Testament, denunciations and warnings against intemperance are frequent and pointed. These, however, were directed more against the converted heathens than the Jews, who at that period were, in general, more temperate in their habits than they had been in previous ages. This evidently appears from the absence of those reproofs for intemperance by the Saviour, which, doubtless, under other circumstances, he would have given. The Saviour's labours were altogether confined to that people; and in one instance only did he allude to the effects of intemperance; and that rather as a warning against a possible contingency even amongst his own disciples, than as a vice generally prevailing in the nation.

* Amos, ii. 11, 12.

† Idem, vi. 3-6.

‡ Hosea, iv. 17, 18.

§ Isaiah, v. 11-14, &c.

¶ Isaiah, xxviii. 1.

** Idem, xxiii. 7.

Hosea, xxi. 9-15.

Hosea xlii. 5, 6.

† Prov. xxx. 8, 9.

The heathens were much addicted to intemperance at the time when the Gospel was introduced to their notice. It appears highly probable, that those who were converted by its influence were subject to frequent temptations to recur to their former dissolute practices. Hence the anxiety manifested by the apostle Paul in his epistles to the converted Gentiles. The heathens not unfrequently invited them to be present at their festivals, and to partake of their sacrifices, which have already been shown to have been most intemperate in their character. St. Paul appears to allude to this practice in his epistle to the Corinthians. "Ye cannot drink of the cup of the Lord and the cup of devils,"* thereby intimating that participation in the idolatrous festivities of their heathen countrymen, would totally disqualify them for faithful communion at the table of the Holy Eucharist.

2. This injudicious intercourse formed, at a later period, a subject of deep regret to all sincere followers of a crucified and self-denying Master; and hence the canons of the primitive churches, contain frequent and strong allusions to the dangerous tampering with principle which it necessarily involved. These canons exhibit unimpeachable evidence of backslidings on the part of those who made a profession of Christianity at that early period. Among these enactments are not unfrequently found laws prohibiting not only the laity, but the clergy also, regular or irregular, and priesthood of all ranks, from meeting together for the purpose of intemperate indulgence. A Laodicean canon, for example, (A.D. 367,) states that members of the priesthood and clergy, or even laity, ought not to unite together for the purpose of holding feasts for eating and drinking.

One of the strongest inducements to intemperance among the Christians of early times, was the practice of holding feasts in commemoration of important events on Christmas, Shrovetide, Easter, and other days of like interest. In course of time, similar festivities were instituted in honourable remembrance of persons distinguished for piety and worth. These celebrations appear to have originated in similar practices of the heathens, and, as will afterwards be found, were attended with equally lamentable and degrading results. Like those of the idolatrous ancients, they were at first conducted with frugality, decency, and temperance, but gradually degenerated into scenes of intoxication, riot, and debauchery. The same love of luxurious living which prompted the heathens to multiply their profane feasts, probably influenced the Christians to add to the number of their sacred festivals, until at last they became exceedingly numerous. The works of the Fathers abound in denunciations against those instances of intemperance; and point out, in strong language, the evils

which resulted from such practices. In the writings of Constantine, St. Gregory Nazianzen, St. Chrysostom, and others, these anti-Christian irregularities are forcibly exhibited, and deeply deplored.

St. Augustin, in particular, adverts to the frequency of intemperance at these feasts, and the indifference with which it was viewed by all parties. "Drunken debauches," says he, "pass as permitted amongst us; so that people turn them into solemn feasts, to honour the memory of the martyrs; and that not only on those days which are particularly consecrated to them, (which would be a deplorable abuse to those who look at these things with other eyes than those of the flesh,) but on every day of the year."*

The same evidence is given in writings attributed to St. Cyprian. "Drunkennes," he remarks, "is so common with us in Africa, that it scarce passes for a crime. And do we not see Christians forcing one another to get drunk to celebrate the memory of the martyrs?"†

At the African Synod (A.D. 418, 9.) the lascivious feasts of the Gentiles were prohibited, and in particular such as were held on the natiivities of the Martyrs, and in sacred places; and heathens were commanded not to force Christians to join with them, as it would be deemed a persecution under Christian emperors.

The canons of the Synod of Trullus present equally strong evidence of the existence of intemperance in connexion with the Greek church in the seventh century. The Bacchanalia, for example, were interdicted, to the clergy upon pain of deposition, to the laity upon pain of excommunication.‡

In the records of Church history, at a more recent period, is found ample testimony, of the corruption produced by the influence of luxury and intemperance. The dark ages in particular of the Roman Catholic Church exhibit melancholy illustrations of the subject under consideration. In the sixth century the Emperor Justinian required monks not to enter houses appropriated to the sale of intoxicating liquors. A monk found in a tavern was to be seized and brought before a magistrate, who upon conviction was to give him *due chastisement* and signify the offence to the abbot of his monastery, that he might forthwith be expelled.||

3. The hospitality of the monks materially countenanced and fostered intemperance in this country. The Anglo-Saxons, after their conversion to Christianity, were remarkable for their hospitable conduct.

* Epistle xxii. † Pamel. p. 416.

‡ Canon, 62, Trullans, p. 279.

|| Si visus fuerit aliquis reverendissimorum monachorum in aliqua Tabernarum conversari; hunc repente dari locorum defensoribus,—et castigari convictum; et nuntiari hoc abbati, quatenus eum expellat monasterio, qui talia deliquit; utpote in confusionem vitæ Angelicam hanc conversationem mutantem. Justin.—*Corpus Juris Civilis*.

Spelman relates, that the canons of the church commanded the Anglo-Saxon priests not only to practice hospitality themselves, but to urge the necessity, and commend the practice of it frequently to the people.*

The Kings of England, at this period, devoted immense sums of money, for the purpose of celebrating with splendour the various church festivals, which were held at Christmas, Easter, and Whitsuntide. Entertainment was provided at the monasteries for travellers of all descriptions. This hospitality frequently led to scenes of riot and excess.†

Reference has already been made to the excessive intemperance of the Danes and Anglo-Saxons. This evil practice is extended to their religious festivals, on which occasion they are described as drinking large draughts of liquor to the honour of Christ, the Virgin Mary, the Apostles, and other Saints.‡

A Synod of the clergy, held about the middle of the eighth century, commanded that "the sin of drunkenness be avoided, especially in the clergy." Boniface, Archbishop of Mentz, in a letter, which he wrote to Cuthbert, Archbishop of Canterbury, observes, that *the English Bishops so far from punishing drunkenness, were guilty of the same*. Moreover, he adds—"Drunkenness is a special evil of our nation," (that is of the Saxon, of which country, Boniface was a native); and specifies, that "neither Franks, nor Gauls, nor Lombards, nor Romans, nor Greeks, were guilty thereof."||

Charlemagne, or his son Lewis, were the authors of certain laws against drunkenness among the clergy, who are warned, not only to avoid excess themselves, but to take care, lest they become the cause of it in others, by pressing them to drink. In another place, the clergy are commanded, "by all means to abstain from drunkenness, as the incentive and cherisher of all vices." Whoever was convicted of this vice, was to suffer according to his order. A priest or deacon was liable to *forty days excommunication*, and a subdeacon to *corporal punishment*.§ The clergy were interdicted from going into a tavern *to eat or drink there at all*, unless necessity obliged them to do so *as travellers on the road*.¶ The council of Tours, 1282, made a similar enactment.

Legrand d'Aussy states that at first the monks drank wine in goblets, and that it was a libation or religious ceremony. They were accustomed, likewise, to drink to the dead, which practice however was interdicted as idolatrous. At a subsequent

period each member of the church was limited to a certain quantity of wine. The Council of 817, for example, allowed five pounds by weight of wine, daily, to each monk.

William of Malmsbury relates that Edmund the First, was murdered at a feast held in honour of St. Augustin, the English Apostle. This event occurred in Puckle Church, Gloucestershire, A.D. 946. The King with all his nobles and courtiers were so intoxicated with the liquor they had drunk, as to be unable to offer the least resistance to the daring regicide.*

The same celebrated historian, however, candidly admits, that these excesses among the clergy, although too general, were not universal, as he himself could testify from personal observation, and expresses a hope that the innocent would not be involved in the same disgrace with the guilty.†

It was about this period in English history that the laws which prohibited "drinking at pins," were again enforced. These laws were in particular directed against the rural clergy.

4. In the fourteenth and fifteenth centuries, remarkable examples of feasting were exhibited at the installation of several of the dignitaries of the church. On these festive occasions, immense quantities of malt liquor and wine were consumed, and it will excite little surprise, to find that consequences ensued not creditable either to the cause of religion, or to those who possessed so important an influence over its interests.

The ceremonies observed at the "Feast of the Ass," in certain parts of France, in connexion with the Roman Catholic Church, (A.D. 1322,) will remind the classical reader of like scenes in the Bacchanalian festivals of the heathens. An account of this feast is found in a manuscript missal, originally composed by Pierre Corbeil, Archbishop of Sens, who died A.D. 1322. It is said to be written in a beautiful manner, and its cover is ornamented with representations of all the operations of the vintage and other mythological subjects. At the period when the manuscript was written, the ceremonies attendant on this feast, were in the highest degree bacchanalian and impious. The priests entered the choir besmeared with lees of wine, dancing, and singing profane songs, while the inferior officers of the church, polluted the altar by playing cards upon it, and eating in the most disgusting manner. During the celebration of mass, old shoes were burned upon the censer, instead of incense, and the deacons and their companions were afterwards carried through the streets, in carts, practising various indecencies. "For several days, the most disgusting and extravagant actions were continued, and drunkenness

* Spelman, Concil, tom. i.

† Anglia Sacra, tom. ii.

‡ Bartholin. lib. ii. c. 12.

§ Spelman, concil, p. 211.

¶ Baluzius, tom. i. col. 1071.

* Capit. Episcop. A.D. 801, cap. 19. Ut nullus Presbyterorum edendi aut bibendi causâ ingrediatur in Tabernas.—Baluz. i, 360. Nisi Peregrinationis necessitate compulsi. Goldastus, tom. iii.

* W. Malmsbury, lib. ii. c. 7.

† Idem, b. iii.

and wanton singling, universally prevailed both among the clergy and laity.”*

The manners of the clergy in the fourteenth and fifteenth centuries, were extremely gross and discreditable to the cause of religion. The luxury and intemperance of the high dignitaries of the church, afforded a pernicious example to its inferior officers, whose conduct is thus described by a modern historian. “The secular clergy, were no enemies to the pleasures of the table, and some of them contrived to convert gluttony and drunkenness into religious ceremonies, by the celebration of ‘glutton-masses,’ as they very properly called them. These glutton-masses were celebrated five times a year, in honour of the Virgin Mary, in this manner: Early in the morning, the people of the parish assembled in the church, loaded with ample stores of meats and drinks of all kinds. As soon as mass ended, the feast began, in which the clergy and laity engaged with equal ardour. The church was turned into a tavern, and became a scene of excessive riot and intemperance. The priests and people of different parishes entered into formal contests, which of them should have the greatest glutton-mass, *i. e.* which of them should devour the greatest quantities of meat and drink in honour of the Virgin Mary.”†

Sir John Chardin gives a lamentable account of the state of the Christian churches about this period in Persian Georgia. “No men,” says he, “are more addicted to beastly drunkenness than the Georgians, in which filthy practices they indulge with more freedom, because it is so common, and not looked upon as scandalous.” The churchmen will be as drunk as others — at which nobody is offended, as being no more than is generally practised, and as it were authorized by custom, insomuch, that the superior of the Capuchins assured me, that he had heard the Catholicos, or Patriarch, of Georgia, say, that he who was not drunk at great festivals, such as Easter and Christmas, could not be a good Christian, and deserved to be excommunicated.”‡

Similar practices appear to have existed generally among Christians in those parts. The *Mingrelian* Persians celebrated their principal religious festivals, by indulging in their houses to great excess, both in eating and drinking.¶

The vices of the monasteries in the fifteenth and sixteenth centuries are described as excessive. A principal cause of this excess originated, as has been noticed, in the case of the Anglo-Saxons in the hospitality observed in these establishments, and the frequent and luxurious feasts held on particular occasions. As an instance of this

extravagance it may be remarked, that in Scotland, where the manners of the inmates of the monasteries were not so dissolute, there was annually used in one Abbey, about nine thousand bushels of malt. It may be further noticed, that the nature of the revenues of these monastic establishments prompted to this excess.

Such were the luxurious habits of the religious orders of these times, that it was notorious that the best wines were to be found at the houses of the priests. Hollinshed remarks, “that the strongest wines” used to be called “Theologicum;” and the laymen, when they wished to spend a singularly jovial hour, used to send for wine to the parson of the parish. “The Merchant,” says this distinguished writer, “would have thought that his soule should have gone streightwaie to the divell, if he would have served them with other than the best.”*

At the commencement of the sixteenth century, the influence of similar manners very generally displayed itself in most parts of the religious world. This corruption extended not only to the people, but to their religious instructors.

It is recorded of the people of Switzerland, that “broils and conflicts, riot and debauchery, constituted their highest enjoyments;” and immediately afterwards the same author adds,† “The wealth possessed by the convents led to the greatest corruption and excess, many of the clergy were wholly illiterate, others indulged in habits of gaming, drinking, and swearing, and many unblushingly lived in open concubinage.” These occurrences took place previous to the period of the Reformation.‡

In the seventeenth century there is much reason to believe, that the cause of religion suffered greatly, even in our own country, from the effects of intemperance. Yet at this period the profession of religion was very general, and fashionable vices of the age were discountenanced by the ruling authorities. Many excellent men, however, made ineffectual efforts to remove this national stain. One of the most prominent appeals was the one entitled “The Blemish of Government, the Shame of Religion, the Disgrace of Mankind, &c., by R. Younge, London, 1658.” This writer evidently viewed intemperance as a great obstacle to the diffusion of religion, even in the Reformed Churches of England.

The following extract from the parish books of Darlington, is too interesting and illustrative to be omitted. Whether the items in question, ought to be laid at the door of the “ministeres,” or what, perhaps, is, more probable, to the bibulous propensities of the parish officers, is a matter which the reader himself must determine.

* Collett’s Relics of Literature, p. 138.

† Wilkin. Concilia, tom. iii. p. 389, Henry’s Hist. Eng. vol. x. p. 315.

‡ Sir J. Chardin’s Travels, pp. 190-1.

¶ Idem, p. 104.

* Harrison apud Hollinshed, p. 166.

† Zschokke’s History of Switzerland, p. 175.

‡ Ibid. p. 175.

But they amply prove how much the drinking customs of the age were associated with more sacred matters, and create less surprise at the extent of intemperance, when it is perceived how intimately the practice of drinking was connected with the offices of religion:—

“A.D. 1639. (14 Charles I.) For Mr. Thompson, that preached the forenone and afternone, *for a quarte of sacke*, xiiiiid.

“A.D. 1650, (Commonwealth.) *For sixe quarts of sacke* to the ministere, when we had not a ministere, 9s.

“A.D. 1666, (6 Charles II.) *For one quart of sacke* bestowed on Mr. Jellett, when he preached, 2s. 4d.

“A.D. 1691, (4 William and Mary) *for a pint of brandy*, when Mr. George Bell preached here, 1s. 4d.

“When the Dean of Durham preached here, spent in a treat with him, 3s. 6d.

For a stranger that preached *a dozen of ale*, 1s.!!!”*

5. Religious festivals, although modified in their character, have been encouraged since the establishment of the reformed church. The people who had long been habituated to meetings of this description, were not easily disposed to resign such popular means of enjoyment. Remains of these ancient customs are now in existence.

The distribution of gifts to the poor, was associated in former times with the church establishment. At Whitsuntide, for instance, a feast or *holyday* was given, and the stores were provided from common contributions. These feasts were arranged under the superintendence of the churchwardens, who afterwards delivered in a statement of their accounts for the past year. They were seldom concluded without exhibitions of gross intemperance. So usual was it to celebrate the festivals of the church with strong drink, that even the names of the various ales were derived from the respective periods at which they were more particularly drunk. Thus our ancestors had their “Church ales,” their “Whitsun ales,” and their “Easter ales,” as well as many others which it is not necessary to mention in detail.

“The *Whitson ales*,” says a popular writer, “were derived from the *agapai*, or love-feasts of the early Christians, and were so denominated from the churchwardens buying, and laying in from presents also, a large quantity of malt, which they brewed into beer, and sold out in the church or elsewhere. The profits, as well as those from sundry games, there being then no poor-rates, were given to the poor, for whom this was one mode of provision, according to the Christian rule that all festivities should be rendered innocent by alms,” &c.†

Philip Stubbs, a writer of the Elizabethan age, strongly animadverts on the excesses committed on these occasions. “In certain towns,” he remarks, “where drunken Bacchus bears swaie against Christmass and Easter, Whitsunday, or some other times, the churchwardens, for so they call them, of every parish, with the consent of the whole parish, provide half a score or twentie quarters of mant, whereof some they buy of the church stocke, and some is given to them of the parishioners themselves, every one conferring somewhat, according to his ability; which mant being made into very strong ale, or beer, is set to sale, either in the church, or in some other place assigned to that purpose. Then, when this *nippitatum*, this *huff cuppe* as they call it, this nectar of life, is set abroach, well is he that can get the soonest to it, and spends the most at it, for he is counted the godliest man of all the rest, and most in God’s favour, because it is spent upon his church forsooth. If all be true which they say, they bestow that money which is got thereby, for the repair of their churches and chapels; they buy books for the service, cupps for the celebration of sacrament, surplices for Sir John, and such other necessities.”*

Selden was of opinion, that most of the ceremonies associated with the worship of the Roman Catholic church, were derived from the ancient *Saturnalia*, or Feasts of Saturn. A good example of the origin, together with some of the customs connected with these festive occasions, is found in the following description of St. Martin’s-day, generally called, Martinmass, or Martilmass. “This day is a great festival on the continent; new wines then begin to be tasted, and the hours are spent in carousing. An old author says, that the great doings on this occasion almost throughout Europe in his time, are derived from an ancient Athenian festival observed in honour of Bacchus, upon the 11th, 12th, and 13th days of the month *Anthesterion*, corresponding with our November. Another says, that the 11th month had a name from the ceremony of “tapping their barrels on it,” when it was customary to make merry. It is likewise imagined by Dr. Stukely, in his “Itinerary,” concerning *Martinsal-hill*, thus: “I take the name of this hill to come from the merriments among the northern people, called *Martinalia*, or drinking healths to the memory of St. Martin, as practised by our Saxon and Danish ancestors,” &c. &c.†

In some of the old church calendars the celebration of this day is thus made mention of: “The *Martinalia*, a genial feast, wines are tasted of, and drawn from the lees; Bacchus is the figure of Martin.”‡

* Surtees’ Durham, vol. iii. pp. 365-6.

† Hone’s Every Day Book, vol. i. p. 686.

* The Anatomie of Abuses. 1595.

† Hone’s Every Day Book, vol. i. p. 1471.

‡ Brady’s Clavis Calendaria.

"It is the day of Martilmasse,
Cuppes of ale should freolie passe."*

These popular occasions originally established as solemn observances, degenerated into scenes of drunkenness and debauchery. The one called Midsummer Vigils, or Vigil of St. John, comes under this description. At these times bonfires were universally made, a practice supposed by many to have been a relic of heathen superstition. A creditable writer thus describes the excesses which are common at this period. "This vigil ought to be held with cheerfulness and piety, but not with such merriment as is shown by the profane lovers of this world, who make great fires in the streets, and indulge themselves with filthy and unlawful games, to which they added gluttony and drunkenness, and the commission of many other shameful indecencies."†

The wakes, so popular a means of amusement among the people of this country, are generally supposed to bear much similarity to the Agapæ, or love-feasts of the primitive Christians, and to have been founded on religious principles. It appears more probable, however, that they originated in some of the pagan rites of the heathens, a supposition which is confirmed by Pope Gregory, in a letter addressed to Melitus, a British abbot.‡

The wakes, in primitive times, were held on the days of church dedications, or on the birth-days of the saints, to whose honour these sacred edifices were dedicated. Like other similar occasions, they were at first conducted with solemnity and decorum. According to an old author, the people, on the vigil of the saint, proceeded "to church with candellys burning, and would wake, and come toward night to the church in their devocion;" a practice in agreement with a canon established by King Edgar, whereby those persons who came to the church were ordered to pray devoutly, and *not to betake themselves to drunkenness and debauchery*, an enactment which strongly indicates the necessity for legal restriction. The author before quoted, proceeds as follows:—"Afterwards the pepul fell to letcherie; and songs and daunces, with harping and piping, and also to glotony and sinne; and so tourned the holyness to cursydness; wherefore holy faders ordeyned the pepul to leve that waking and to fast the eveyn, but it is called vigilia, that is waking, in English, and eveyn, for of eveyn they were wont to come to church." These festivals in course of time became so popular, and the riot and debaucheries which they occasioned were so common, that they were eventually suppressed, and secular fairs, into which they had more or less degenerated, were established in their place. Most of the

fairs now held in the kingdom are celebrated on saints days, and in many parts still retain the name of *wakes*. Philip Stubbs affords additional proof of the excesses committed at wakes. In speaking of "the manner of keeping of wakesses in England," he says, they were "the sourcies of gluttonie and drunkenness," and adds, that "many spend more at these wakesses than in all the whole year besides." How applicable is this remark to our own times.

The eighteenth century may very appropriately be termed the dark age of Protestantism. Much of this lamentable decline may be traced to the enervating influence of strong drink. Members of the clergy were openly addicted to intemperance: it need, therefore, excite little surprise if the same vice was common among their parishioners. De Foe writes in the following language:—

The country poor do by example live,

* * * * *
A drunken clergy, and a swearing bench,
Has giv'n the Reformation such a drench,
As wise men think there is some cause to doubt,
*Will purge good manners and religion out.**

A principal cause of this ministerial laxity may be recognized in the gross habits which many of them acquired during their residence at the Universities. It was no uncommon circumstance to witness the students at these academies of learning, devoting that time to Bacchanalian excesses, which ought to have been employed in attention to study and religious ordinances. Educated in such a manner, it can excite little astonishment, that habits of a similar character were followed by many of the clergymen in their parishes—and thus was an example introduced the more lamentably injurious from the nature of the support by which it was countenanced. These transactions are so recent in their occurrence, and so amply referred to in contemporaneous works that it is unnecessary here to enter into any further detail respecting their progress and effects.

These sketches of intemperance, it is presumed, fully justify the following conclusions:

1st. That Intemperance has in most ages of the world, been intimately associated with the profession of religion; and,

2ndly. That the most disastrous effects have resulted from this association, among which we may include—laxity of church discipline, deterioration of vital and personal piety; and, as a consequence, the general declension of religious welfare.

An examination and comparison of the prevalence or declension of religious welfare, at various periods of the world, exhibit a cheering or depressing aspect, in proportion to the extension or curtailment of luxurious practices. Religion is ever at war with the appetites; and the ascendancy of sensual indulgence invariably precedes the decline of spiritual prosperity. The attacks of infi-

* Ballad, entitled "Martilmasse day. Times Telescope, 1814."

† MSS. Harl. 2354 and 2391.

‡ Bede. Eccl. Hist. lib. i. cap. 30.

* True-born Englishman; Part II.

delity and the evils of scepticism, are harmless in their effects, compared with the insinuating and soul-destroying influence of intoxicating liquors. In every age they have silently, yet destructively undermined the foundations of piety; the curse of intemperance, like the canker-worm, leaving fearful marks of its desolating progress.

We have thus, in as brief a manner as possible, exhibited the evil effects of strong drink upon religious welfare, up to a recent period. It becomes a matter of equal, if not paramount importance, to inquire how far intemperance exists in the present day, in connexion with the profession of religion, and the influence it exercises in retarding the diffusion of Christian principles.

IV. *The use of intoxicating liquors considered as an obstacle to the introduction of Christianity among heathen and other nations.*

The examples of intemperance exhibited in the practices of those who belong to countries professedly Christian, forms undoubtedly a serious hindrance to the reception of Christian principles among heathen nations. Of this obstacle, the respective missionaries of various Christian Societies loudly complain; and yet how natural it is for the heathens to refuse instruction in a system of religion, of the alleged good effects of which they witness such sad examples in the persons of its professors, and that too, from countries where its principles are universally acknowledged. Under such circumstances, it need not excite surprise, that they prefer adherence to the profession of that religion in which they have been trained up from the earliest period of their existence, and which, in fact, sanctions no such disgusting practices as those who profess Christianity thus introduce amongst them.

"I have visited," states Mr. Charles Purnell, "Calcutta, and other parts of the East Indies, and am of opinion, that the outward conduct, at least, of the Hindoo, is beautiful when compared with the conduct of most of the British seamen on shore; and I have often thought it very probable, that while Christian ministers were engaged in pointing out to the Hindoos the absurdity of falling down to stocks and stones, and the necessity of their turning to the true and living God, they would turn round upon the advocate of Christianity, and ask, "Do you want to make us such men as the sailors of your own country?"

A missionary from India, stated,* not long ago, that it was no uncommon thing in Calcutta to see an European lie intoxicated in the street, surrounded by several natives, (who are very scrupulous in the observance of their religious rites and ceremonies,) and to hear them tauntingly exclaim, "here is one of your Europeans, look at him, you never see us get drunken, as you do; let

your missionaries stop at home and preach to their own countrymen."

The Secretary of the Cawnpore Temperance Society strongly adverts to the same humiliating circumstance. The Mussulman and Hindoo, he observes, who are habitually temperate by witnessing the drunkenness which exists in the British army, and among those who are called Christians, refuse to receive a religion, the fruits of which are apparently so evil.*

The Rev. W. O. Croggon, a Wesleyan Missionary, in a communication from Zante, observes, "The state of British sailors is shocking beyond description. It grieves me to the heart to behold them so given to intoxication." The same disastrous example is testified by Capt. W. Jacob, of the East India Company's service, when making reference to the Bay of Islands. "There is much," he remarks, "to discourage missionary efforts in the scenes of immorality and vice which are constantly exhibited, through the intercourse subsisting between the islands and the shipping, and in the dissolute habits of many of the inhabitants, which that intercourse has engendered." Mr. Southgate, the Missionary, in his "Tour in Turkey and Asia," corroborates this statement. "Except among the Christians," says he, "it is rare to find a confirmed drunkard." "The Mussulman," he remarks, "are liable to be seized and punished for their transgression. The Christians, on the contrary, simply because they are Christians, have the privilege of drinking as openly and as much as they please, provided always, that they get peaceably and safe home after it. And again, 'How is it,' said a Persian to me one day, 'that you, being a Christian, make so little use of the privilege which your religion grants you. For my part, I regard it as the most attractive feature of Christianity, that it allows its votaries a free use of the juice of the grape.'"

Thus, to a great extent, are the efforts of the pious missionary paralyzed. This devoted servant of the Most High, labours among the benighted heathens, and unfolds to them the blessings which the Gospel has in store for those who adopt its principles; but *strong drink, introduced by inhabitants of Christian countries*, speedily erases all the good impressions which his addresses may have produced, and his labours are rendered comparatively ineffectual. The sincere Christian cannot but weep with the pious Williams over scenes like these. "On arriving at Raitea, I was perplexed and astounded at beholding the scenes of drunkenness which prevailed in my once flourishing station. *There were scarcely one hundred people who had not disgraced themselves; and persons who had made a consistent profession of religion for years, had been*

* London Temperance Intelligencer, vol. i. p. 297.

* Sixth Report of the British and Foreign Temperance Society, p. 55.

drawn into the vortex."* In writing from the South Sea Islands, the missionaries of the London Missionary Society, state, "The besetting sin at Tahiti, at present, is drunkenness, and it has produced great mischief in the churches."

"A trading captain brought a small cask (of ardent spirits) on shore, and sold it to the natives. This revived their dormant appetite, and like pent-up waters, the disposition burst forth, and with the impetuosity of a resistless torrent, carried the people before it, so that they appeared maddened with infatuation. I could scarcely imagine that they were the same persons among whom I had lived so long, and of whom I had thought so highly."*

A pious and devoted Missionary recently made the following statement. "From my knowledge of the ungodly Europeans in New Zealand, I do not hesitate to say, that their example in encouraging drunkenness and fornication, &c., tends more than anything else to counteract our missionary operations. When European, and other shipping, touch at the harbours, their crews are like a pestilence among the natives. Oh, what blood-guiltiness stains the consciences of sea-faring men who have visited the Islands of the South Seas! It should be known that intemperance, practised by Europeans, is an obstacle to missionary enterprise. In the Bay of Islands there are several grog-houses, and the natives and our own countrymen yield to the inebriating draught; and many have come to an untimely end."†

Can we wonder after these statements that the Chief of *Eimes* should send this message to England and America. "*I hope he will go to Britannia, and beg the people to have mercy on us, and then go to America, and beg the people there also to have mercy on us, because it was these countries that sent this poison amongst us!*"

In reference to the introduction of strong drink into the islands of the Pacific, in connexion with other obstructions to religion, Daniel Wheeler, a minister of the Society of Friends, writes thus:—"Hopeless, indeed, (humanly speaking,) appears every attempt to Christianize the natives of those islands who are labouring under, and exposed to, these disadvantages, which must ever obstruct the free course of the gospel."

The Americans contribute much to this awful state of things. Dr. Charles A. Lee remarks, "It is a lamentable fact that no nation has done more to introduce intoxicating liquors into heathen countries than the United States. For example: during the year 1835, fourteen merchant vessels, eleven of which were American, sold in the port of Honolulu, Island of Maui, alone, 16,950 gallons ardent of spirits, and carried

37,522 gallons to the Indians of the Northwest coast, making 54,000 gallons of rum and brandy distributed among the natives, and it was ascertained that the largest proportion of this was shipped by a *deacon* of a congregational church in Boston. New England has found its way from California, to Behrings Straits, among all the Islands of the Pacific and Indian oceans, and it has even penetrated into Africa, Egypt, and through the whole extent of the Sultan's dominions."*

The simple Indian cannot forbear to reproach his religious instructor with an inconsistency so glaringly opposed to the principles of humanity, and much more of Christianity. "I am glad," said a missionary to an Indian chief, "that you do not drink whiskey, but it grieves me to find that your people are accustomed to use so much of it." "Ah, yes" said the red man, as he fixed an eloquent eye upon the preacher, which communicated the reproof before he uttered it,—"*we Indians use a great deal of whiskey; but we do not make it!!*"

The Rev. Peter Jones, in reference to the morals of the Chippewa Indian tribes, states, that "they abstain entirely from drinking ardent spirits, although frequently urged to do so by the wicked white people, who use every means in their power to turn them again to their old crooked ways."

Scarcely any tribe among the untutored Indians in North America, has been free from the consequences arising from the introduction and use of alcoholic liquors. The records of missionary labours among those tribes exhibit in the strongest light the obstacles which this demoralizing practice presents to the introduction and diffusion of religious truth.

The same injurious example is found to exist among professing Christians in Mahomedan countries, and is productive of corresponding impressions on the followers of the prophet. The remarks of a respected missionary in Persia are to the point. "What kind of Christianity do the Mahomedans of this country behold? None *that has life*—none that is productive of a *morality* even *equal* to their own; intemperance, for instance, is so common among the *Christians* of Persia, and the few Europeans who stroll hither for the sake of lucre, that when Mahomedans see one of their own sect *intoxicated*, which is now become rather common, they at once say, 'That man has left Mahomed, and has gone over to Jesus.'† The increase in the sale of rum in Constantinople within the last twelve years is astonishing. The annual exportation of rum from England into Turkey advanced, in seven years, (1827 to 1834) from 8,530, to 97,108 gallons, or about 1038 per cent.

* Bacchus, American Edition. Note by Charles Lee, A.M. M.D., p. 74.

† Extract of a letter from the Rev. Justin Perkins, missionary in Persia.—*American Christian Intelligencer*

* Missionary Enterprises, by the Rev. John Williams, pp. 405, 406, 465.

† Evangel. Magazine, July, 1839.

Similar observations may be applied to China. The Chinese view with great jealousy the introduction of foreign customs into their country, and in particular the attempts made to convert them to Christianity. These strong prejudices have, no doubt, been greatly strengthened by the intemperate conduct of the inhabitants of Christian countries, occasionally resident among them. In the year 1831, the Chinese authorities at Canton, had occasion to issue a proclamation, by which the sale of wine and spirits to foreign seamen was prohibited. This measure originated in the intemperate conduct of European and American seamen, who, in their fits of intoxication, frequently disturbed the public peace, and this to so serious an extent, as to cause a suspension of commercial intercourse between China and European nations.* Lamentable indeed must be that state of things which compels the Government of a heathen territory to restrain the immorality of natives of a Christian land.

The inconsistent conduct of professing Christians, exhibits a similar result in regard to the exertions now being made for the conversion of the posterity of Abraham. It can, therefore, excite little surprise, that these efforts have, hitherto, in a great measure, been ineffectual. These remarks more particularly apply to Poland and Russia. According to the statements of a recently converted member of this sect, the inconsistencies of Christian professors form the main obstacle to the conversion of the Jews. "In the better classes of society on the continent, there is, as I have already said, more strictness of morals among the Jews, than among the Christians."† "The immorality of the Christian is quite proverbial among the Jews." Again, "You may imagine what I felt, when inquiring one day of my brother, concerning an old acquaintance, he replied, without having any intention to offend me, or even reflecting how his answer was likely to affect me, 'He lives exactly like a Christian;' meaning that he led a profligate life."‡ Also, still in relation to the conduct of Christians abroad, "The Jews are aware that Christians have, as well as they, a day which is called their Sabbath, and various other festivals and holy-days. How do they behold those days professedly devoted to the service of Christ, spent by his pretended worshippers. They see the country part of the population coming in to join their brethren of the towns in the services of the church, and after these are over, they see them resort to the public-houses, not merely to spend the rest of the day in rioting and drunkenness, but even in the commission of crimes —," &c. || The narrative is revolting in the extreme.

* Journal of Humanity, May 3rd, 1832.

† "A Brief Sketch of the present State and future Expectation of the Jews," by Ridley H. Herschell, 3rd ed. p. 13.

‡ Ibid, p. 44. Ibid, p. 13.

On reference to the works of travellers in heathen countries, we find that Jews and Christians are the only individuals who openly manufacture and drink inebriating liquors. This fact induces the Mohamedans to look upon intoxication as a privilege of Christians. "It is," they often remark to one, says a distinguished traveller, "a privilege of your religion to be drunk, and therefore neither attended with shame nor disgrace." And it is often found, we are informed, a difficult matter to persuade them to the contrary. All wonder at this circumstance will cease on the perusal of the following brief facts, the number of which might be greatly amplified did space permit.

"I need scarcely mention," says one writer, "that the Turks make no wine, but the Christians and Jews are allowed to make sufficient for their own use, upon payment of a certain tax.* "Of arrack," says the same author, the "Christians and Jews drink pretty liberally."

"The Jews and Armenian Christians," says another writer, "are the principal manufacturers of wine in Persia."†

Barrow states in his Travels in China, that the Missionaries alone, who lived near to the capital, manufactured wine.‡

Intemperance is the most powerful antagonist to religion in almost every portion of the globe.

The efforts of Christians to remove this plague-spot from the face of the world have hitherto been partial and ineffectual. The subject demands the immediate and serious attention of missionary committees and contributors. Not only will the Gospel make little progress among the heathens so long as such injurious examples are presented for their imitation, but contempt and indifference will be excited in regard to a religion, the good fruits of which are so little apparent in the conduct of those who professedly adopt its principles.

V.—*The use of Inebriating Liquors considered as an antagonist to the Gospel at home.*

This part of our inquiry may be considered either in regard to the effects produced on particular churches, or the insurmountable difficulties which it offers to the conversion of a wicked world. In both instances this inquiry presents a melancholy, though profitable subject, for Christian reflection.

1. IN ITS EFFECTS ON CHRISTIAN CHURCHES IN PARTICULAR.

The habitual use of strong drink by members of Christian churches in the present day, is attended with most injurious consequences, both as regards the usefulness of churches as a whole, and the influence which the habit exercises on the personal

* Russell's Natural History of Aleppo, p. 19.

† Morewood's Essay on Ineb. Liquors, p. 61.

‡ Travels, 4to p. 304.

piety of individual members. Watchfulness and vigour are essential requisites in the Christian character. Alcoholic stimulants tend to produce apathy and indifference, and peculiarly unfit the mind for calm and serious reflection. The foundation is thus laid for spiritual declension and fall. "I have frequently," remarks the Rev. Leonard Woods, "and with deep concern, reflected on the effect of stimulating drinks upon our moral and religious state. And such is the result of reflection, that, if I look back to the time when ministers and Christians generally made use of such drinks, I am ready to wonder that their spiritual interests were not totally blasted, had not God, in great forbearance and mercy, winked at the times of this ignorance. But with the light now cast on the subject, it seems to me incredible, that a minister of the Gospel can be in the habit of using any intoxicating liquor, though in moderate quantities, without essentially injuring his own piety and diminishing the success of his labours. This view of the subject, which I have taken the liberty to express very plainly, is the result of much sober and careful observation on myself and others, as to the moral influence of the habit which was once so common. *It tends to inflame all that is depraved and earthly in a minister, and to extinguish all that is spiritual and holy. It is poison to the soul, as really as to the body.* Such is my conviction, and there are hundreds and thousands who have the same conviction, and will express it in terms equally strong. Nor is it a matter of imagination or conjecture with us. We know it just as certainly as any one, from uniform experience and observation, knows the effect of opium or arsenic upon the animal system; and just as certainly as any Christian knows by experience the effect produced upon his spiritual state by the commission of sin. We know it by sorrowful recollection: we know it by what was, at the time, a *real* but frequently *suppressed* inward consciousness; and it was this deep consciousness which always kept me and most other ministers from drinking distilled or fermented liquor, just before engaging in any religious service, public or private."*

The Rev. J. Wesley, made a wise and vigorous effort to remove this anti-spiritualizing evil, and had his efforts been efficiently supported by his successors, the Christian world would have been incalculably benefitted. That the advice and rules of Mr. Wesley, in this respect, were acted upon during his own long and active life may be seen from an entry in his published journal. March 12, 1743, he records, that when visiting the Society at Newcastle, he "excluded from the Society, seventeen persons

for *drunkenness, and two for retailing spirituous liquors.*"* From this and other circumstances recorded in the life of that eminent and pious minister of the Gospel, it is evident that he looked upon discipline in this respect as essential to the purity and welfare of the Church.

The number of Christian professors who have fallen through intemperance, is lamentable evidence of the fact under consideration.

The Rev. J. R. Barbour, of Newbury, Massachusetts, America, states, that in one hundred and thirty-five churches, out of eight hundred cases of excommunication, three hundred and seventy were for intemperance; and of eight hundred and thirty-four confessions reported from the same churches, intemperance was confessed in three hundred and seventy-nine cases, besides fifty-six cases in which the individuals became intemperate soon after their exclusion, or were placed under discipline for indulgence in the same degrading vice. Thus of one thousand six hundred and thirty-four cases of discipline reported, eight hundred and five show the appalling power of this sin. But even this statement is far from exhibiting the full extent of the evil: the *indirect* influence of spirituous liquors must be added; and in representing this, Mr. Barbour declares it to be his deliberate conviction, from documents to which he has had access, that *seven-eighths* at least of all the offences requiring discipline in the American churches for the last twenty or thirty years, have originated directly or indirectly, in the use of strong drink.

The Rev. W. R. Baker says, "he has now had nearly twenty years experience in the ministry, and the result of his observations and inquiries is the firm conviction, that full *five-sixths* of the cases in which Christian professors have either been expelled from Christian communion, or have been obliged to withdraw from it, have been cases of intemperance."

These startling and appalling statements, are corroborated by similar evidence in regard to the Christian church generally. Additional proofs, either of ministers or members of religious communities being injured by the same Anti-Christian cause, are of frequent occurrence.

It is truly lamentable to find how great a number of influential members, and even officers of various Christian churches, are engaged in the *traffic* of strong drink. In America, previous to the temperance reformation, this was the case to a most deplorable extent. In our own country this unholy alliance is not uncommon. In a recent publication it is stated, that in one of the western counties, a Baptist minister is engaged in the spirit trade. "Nor far from the residence of this individual is a Dissenting Society, one of the chief men in which

* Statement of the Rev. Leonard Woods, D.D., Professor of Christian Theology in the Theological Seminary, Andover, Massachusetts. 9th Report, American Temperance Society.

* Wesley's Works, vol. i. p. 416: edit. 1829.

is a *wine and spirit merchant*, in one part of the town, and a *gin-shop keeper* in another." "In the county town of one of the eastern counties, is a deacon of an Independent church; who, not content with the profits of a large brewery, must also become a spirit merchant, and the only gin-shop in the town has the honour of being under his superintendence. A few weeks ago he was fitting up another in a neighbouring place."*

Examples of this kind are not uncommon, as the author can testify from personal observation and inquiry.

The use of Intoxicating Liquor by Ministers of the Gospel, will be found to have an injurious effect on ministerial character and usefulness. The office of a minister of religion is peculiarly sacred, and the influence which it carries with it is proportionably important. If serenity of mind, cautious behaviour, and unblemished example, are essential in one character more than another, they are so in that of an instructor of religion. Hence the severe and circumstantial regulations which relate to the conduct of the priesthood, under the Levitical dispensation; and the careful directions which were laid down by the Apostles for the guidance of bishops and other officers of the church, all of which had reference to those practices which had a tendency to diminish ministerial usefulness and zeal.

An examination of the canons of the Christian church exhibits in a strong light the importance attached to ministerial caution and conduct. The Apostolical canons, so called from their containing the disciplinary rules of the church during the first ages, enact that if a clergyman be found eating in a victualling-house, except on journeys, that is when necessity compels him, he shall be suspended from communion.

The Laodicean canons (A.D. 367), enact that none who belong to the priesthood, from a priest to a deacon downwards in the Ecclesiastical order, even to ministers, readers, exorcists, ostiaries, or of the rank of asecetics, shall enter a public-house.

The African code also prohibits clergymen from entering victualling-houses to eat or drink unless during their travels in cases of necessity. The law of Justinus in relation to monks found in taverns, has been cited in an earlier part of this chapter. The council of Tours, (1282) passed a similar enactment. The priests were forbidden to enter taverns except when travelling.

A vigorous condition of the mind is essential in those whose office it is to unfold the blessings of divine truth. The habitual use of strong drink enervates the mind, and unfits it for calm and serious reflection.

Woolman, a pious minister of the Society of Friends, in his Journal, makes the following forcible remarks:—"As I have been sometimes much spent in the heat, and taken

spirits to revive me, I have found by experience, that in such circumstances, the mind is not so calmed nor so fitly disposed for divine meditation, as when all such extremes are avoided; and I have felt an increasing care to attend to that Holy Spirit which sets bounds to our desires, and leads those who faithfully follow it to apply all the gifts of Divine Providence, to the purposes for which they were intended."

It is of importance that ministers should possess bodily vigour. No one cause so much tends to induce physical debility as the habitual use of intoxicating liquors. The venerable J. Clayton, of London, when in his eightieth year, thus expressed himself on the occasion of an induction of a young minister:—"Beware of spurious ministerial efforts; avoid the use of stimulants before entering the pulpit; they may produce vehemence of manner, but will add nothing to the proper effect of preaching."*

The example of a religious instructor, is, in general, looked upon as the standard of his flock. *Quales populus talis sacerdos*, has been found, by lamentable experience, to be a correct adage. Hence the paramount necessity that he should be guarded and correct in his conduct, and possess the mastery over all his appetites.

The people naturally conceive that practice to be innocent which is sanctioned or encouraged by their spiritual teachers. They perhaps visit his house, and find intoxicating liquors placed on his table. In the course of his pastoral rounds, probably they witness his acceptance of the proffered glass; and not unfrequently also perceive him indulge in the use of it, in some form or other, previous to entering, and after retiring from, the pulpit. Thus the most sacred character, by practice and example, is made to afford its protection to an insidious and destructive poison.

Illustrations of the extent and injury of this habit both among ministers and lay members of Christian churches, might be adduced at considerable length. A few brief examples only will be given in the present place.

A short time ago there could scarcely be found a place of worship in the province of Ulster, Ireland, without a whiskey-shop being near to it, or a vestry without a vessel containing whiskey. This poisonous liquid was pressed with unceasing importunity upon ministers, at baptisms, marriages, funerals, and even during their ordinary pastoral visits. Houses for the sale of ardent spirits averaged sixteen, eighteen, and even thirty to one baker's establishment; and, in some villages, each shop was converted into a spirit-store. In one town, consisting of eight hundred houses, there were no less than eighty-eight spirit shops.

* Baker's Idolatry of Britain, p. 98.

* Speech of Rev. J. Clayton, sen., 1831.—World Newspaper, &c.

"The fruit of this almost universal depravity was everywhere seen in the ruin of property, peace, health, life, happiness, individual, family, and the community. Public sentiment was totally depraved; church discipline was paralyzed; the preacher was a drunkard, and the people chose to have it so. Popular ministers have become bloated by intemperance, and have come to a shameful end. Twenty contiguous congregations are described as having had drunken ministers, who ultimately lost their lives through this sin."*

In many parts of Scotland, a similar association exists between strong drink and the various ordinances of the church. It is stated, on undoubted authority, that in some presbyteries, the presbyterial dinner is supplied with liquor purchased with the proceeds of fines imposed on various occasions. Thus, when a clergyman obtains a new manse, or becomes married, he is mulcted in a bottle of wine. The same penalty is enforced on the birth of a child, or on the publication of a sermon. As all ministers do not get new manses, wives and children, or publish sermons, in order to equalize matters, bachelors who have *not* yet been married, after a specified period, or those, who, in the marriage state, have no offspring, or who do not obtain a new manse, and so on, are severally doomed to be put upon the list, and fined for omission, as others have been for commission. Thus, no man escapes this arbitrary practice. These occasions are stated to be so frequent in their occurrence, that an officer, called the comptroller, is appointed to adjust the various fines, and to maintain equality of contribution among all parties. The consequences may be readily conceived. "The industrious, hearing of these things are thus led to connect certain circumstances with liquor, and are apt to impose a fine of whiskey at particular opportunities *in imitation of their religious instructors*."†

Dr. Humphrey, President of Amherst college, who, with other gentlemen from America, paid a visit to this country, for the purpose of promoting the cause of temperance, makes some pertinent observations in relation to the same subject. After alluding to a practice which his colleague, Dr. Codman, had faithfully animadverted upon, viz: "*the wine which was offered to him after preaching, in all the vestries*;" he remarks as follows:—"I was surprised and pained to find the *wine decanters*, so generally upon the tables of ministers, as well as the members of their churches, almost wherever I was invited to dine. And not only so, but again and again was the wine brought on to the supper table, just before we bowed at the family altar and retired to rest. This custom, I believe, is kept up by some

clergymen who are members of the temperance (*moderation*) society; and I could not help saying often, the CURSE of intemperance, I am persuaded, will NEVER be removed till *you give up your wine*."*

In America, at a period prior to the temperance reformation, ministerial character and usefulness suffered severely from the effects of intoxicating liquor. The Rev. Leonard Woods states, "that at a particular period, previous to the temperance reformation, he was able to count up nearly forty ministers of the Gospel, none of whom resided at a very great distance, who were either drunkards, or so far addicted to intemperate drinking, that their reputation and usefulness were greatly injured, if not utterly ruined." He mentions also an ordination that took place about twenty years ago, at which he was ashamed and grieved to see two aged ministers literally drunk; and a third, indecently excited with strong drink. "These disgusting and appalling facts," adds this justly esteemed minister of the Gospel, "I could wish might be concealed. But they were made public by the guilty persons; and I have thought it just and proper to mention them, in order to show how much we owe to a compassionate God for the great deliverance he has wrought."†

Unfortunately for the interests of religion, examples of a like nature have been witnessed in this country. "I have the pain to know," remarks Dr. Dods, in his examination before a Committee of the House of Commons, "several clergymen who are addicted to habits of intemperance. I remember one who became a common soldier from such indulgence. I know others who, at present, are filling menial offices from the same indulgence; and I know several who have been excluded from their churches, and are living in disgrace, with their relations and others, on whom they depend. In churches, where the same strict discipline is not exercised over all the ministers, frequent excesses are by no means uncommon."‡

"Nearly all the blemishes," remarks the Rev. Richard Knill, "which have been found on the characters of ministers, for the last fifty years, have arisen, directly or indirectly, from the free use of intoxicating liquors."

These awful facts exhibit the urgent necessity of banishing the use of strong drink from Christian communities, and from the sanction of Christian practice.

II.—IN ITS EFFECTS IN PREVENTING THE PROGRESS OF RELIGION.

The almost universal use of strong drink in this country, forms, beyond a question, the principal obstacle in the way of the dif-

* Statement of Professor Edgar, Belfast, Ireland.

† Dunlop's Artificial and Compulsory Drinking Usages of North Britain, p. 9.

* New York Observer, 1837.

† Ninth Report of American Temperance Society.

‡ Dr. R. G. Dods' Report on Drunkenness, 1834, p. 219.

fusion and influence of religion. A writer, in a recent number of a valuable religious publication, states it as his belief, that drunkenness is destroying more souls, than all the ministers of the Gospel are instrumental in saving.* The Christian world hitherto has regarded this subject with too little interest and attention, if not with criminal apathy and neglect; forming, as it undoubtedly does, so serious an obstacle to the conversion of sinners. Religion embraces, amongst its most holy and sublime characteristics, the essence of genuine and spiritual worship; the appetite for strong drink is selfish and depraving, and as such opposed to the worship and love of God. St. Paul remarks on the distinction between fleshy lusts and the fruits of the Spirit, that "the kingdom of God is not meat and drink, but righteousness, peace, and joy in the Holy Ghost."†

It is impossible that the Gospel of the Lord Jesus Christ can be universally received, so long as mankind continue to indulge in the use of so powerful an antagonist to its diffusion as intoxicating liquor. This position in no way interferes with the sovereign power of the Redeemer; but, on the contrary, is in exact accordance with the power and principles of the Scripture. The power of God to convert drunkards by the immediate and exclusive agency of his Holy Spirit, is undoubted; and that *sometimes* he does so, is no less certain. It is, however, agreeable with the *will* and *design* of the Almighty, usually to work by means of human agency, (in subordinate co-operation of course, with the all-pervading influence of the Holy Spirit,) and not by miraculous interposition.

The laws of the Old, and the Gospel of the New, Testament, are addressed to beings supposed to possess intellectual and moral capability. Intemperance diminishes, if it does not altogether destroy, both the reason and the affections. The precepts, therefore, of the law, and the promises and privileges of the Gospel, *if they reach him at all*, are not permanent in their influence. The reproaches of conscience, however frequently they may arise, are weak and transitory, and easily overpowered by the influence of strong drink.

The life of the celebrated Rochester presents us with a striking illustration of the preceding remarks. After a brief reference to the intemperance of his early career, Bishop Burnet says, "He had so entirely laid down the intemperance that was growing upon him before his travels, that at his return he hated nothing more; but falling into company that loved these excesses, he was, though not without difficulty, and by many steps, brought back to it again; and *the natural heat of his fancy being inflamed by wine*, made him so extravagantly pleasant, that many, to be more diverted by that

humour, studied to engage him deeper and deeper in intemperance; which, at length, did so entirely subdue him, that, as he told me, *for five years together he was continually drunk; not all the while under the visible effects of it, but his blood was so inflamed, that he was not, in all that time, cool enough to be perfect master of himself.* This led him to say and do many wild and unaccountable things: by this, he said, he had broken the firm constitution of his health, that seemed so strong, that nothing was too hard for it; and he had suffered so much in his reputation, that he almost despaired to recover it."—"In his heats, he would go far after anything that might turn to a jest or matter of diversion."—"He had often sad intervals and severe reflexions upon these exercises; and though then he had not these awakened in him by any deep principle of religion, yet the horror that nature raised in him, especially in some sicknesses, made him too easy to receive some principles which others endeavoured to possess him with; so that he was too soon brought to set himself and fortify his mind against that, by dispossessing it all he could of the belief or apprehensions of religion."—"So he came to bend his wit, and direct his studies and endeavours, to support and strengthen these ill principles in himself and others."*

Man, by nature, is a depraved being; but intemperance renders him tenfold more so. It debars him from all intercourse with his Creator, if it does not altogether deprive him of religious feelings and desires.

It will be shown in a succeeding section how the moral constitution of man is injured by this vice. The intellect becomes weakened, and the moral perception paralyzed by its enervating influence. Hence those powers which ought to be exercised, not only in the attainment of a knowledge of divine truth, but in the cultivation of the higher virtues of religion, are either essentially injured, or totally destroyed; in which state the conversion of the soul appears to be a natural impossibility. Ministers of the Gospel bear ample testimony to this melancholy fact. Two or three appropriate examples are here adduced by way of illustration. Martin Boos, an eminent labourer in the vineyard of the Lord, thus writes in reference to a people among whom he laboured, who were addicted to dissolute practices. "I can make no progress with them, seeing they dance and drink drams till they are drunken, every Sunday. I see no end to my misery, because they are all so coarse and given to drunkenness. My soul is much grieved; I sigh and cry to him, but he hears me not; and though I preach to them, as I have been wont to do, yet the people hear and under-

* Wesleyan Methodist Magazine. Dec. 1836.

† Romans xiv. 17.

* Passages in the Life and Death of John, Earl of Rochester. By Gilbert Burnet, D.D., Bishop of Salisbury. London, 1819. *Passim*.

stand me not. At present I am *sowing upon the highway*; they hear the Word, but afterwards Satan comes and takes it out of their hearts, lest they should believe and be saved." * "There are those," says an old divine, (Watson, 1662,) who steep sermons in drink; they drink away convictions, and, like the wounded deer, run to drink. The *tabern* bell, I fear, does more hurt than the *church* bell does good."

This almost universal source of ministerial grief and unfruitfulness, is not confined to any denomination of Christians, or portion of the world, as the following examples will sufficiently demonstrate. A minister of the Established Church, in Dublin, thus writes:—October 20th, 1833, Sunday night. "Never since I entered this city, did I witness such an outrageous and open violation of the Sabbath, as I did this evening, on my way to and from divine service! *All the dram shops and whiskey shops appeared to be open and illuminated; they were filled with besotted creatures*, who were shouting and huzzaing, to the great terror of the peaceable inhabitants, and annoyance of the female passengers, going to their respective places of worship. It is almost in vain for us to preach peace and soberness, if this soul-destroying vice of drunkenness be encouraged by legal enactments. It would really appear this night, without exaggeration, that the flood-gates of hell were opened in our city, so fiendish, so tumultuous, and so virulent were the wicked votaries who issued from these shops." †

In London, and other large towns, similar scenes may be witnessed each returning Sabbath. Multitudes of wretched creatures eagerly enter those splendid Juggernauts of our land, the modern gin-palaces, and swallow with avidity the fiery poison which is prepared for their use. "Sunday," remarks a graphic writer, "is especially devoted to the worship of this great Spirit (Gin); and when the early Sabbath bells announce the arrival of that day, then do the lower orders begin to shake off the *beery* slumbers of the midnight pay-table, and wander forth in maudlin, unwashed multitudes, to the temples of the great Gin; and there you may see them, the aged and the infant of a span long, old men and maidens, grandsires and grandams, fathers and mothers, husbands, wives, and children, crawling and jostling, and sucking in the portion of the spirit, which the flaunting priestesses of the temple dole out to them in return for their copper offerings." ‡

This picture, heart-rending and lamentable as it may appear, is but a correct representation of scenes which present themselves to Christian observation, each coming Sabbath, in almost every large town throughout the

United Kingdom. With this vast amount of glaring immorality in operation, how is it possible that the labours of devoted ministers of God can be attended with success? Their several spheres of exertion are surrounded on all sides by obstacles of a discouraging and insurmountable nature; while temptations are unceasingly held out to allure the unsuspecting and unwary from the paths of righteousness, temperance, and peace.

The habitual drunkard is seldom induced to enter the house of God. He refuses to hear the word of divine truth, opposed, as he is aware it is, to the soul-destroying vice of sensual indulgence. Thus the *opportunity* to admonish the drunkard to escape from his horrible and degrading slavery seldom occurs, and the besotted wretch is too often left, *even in his sober moments*, pitied indeed, or justly despised, but unaided and unwarned, to abandon his guilty career.

The cause of religion and morality, however, does not suffer only from the *personal* degradation of those wretched victims of intemperance, whose individual cases, lamentable though they be, are in fact, less to be mourned over, than the destructive and pernicious influence which they exercise on society. Every drunkard or sensual character, paradoxical as it may appear, presents a dangerous source of temptation to the neighbourhood in which he resides, and in particular to the family among whom unhappily he is domesticated. The demoniacal sin of drunkenness produces effects characteristic of all sinful habits, namely, those who are enthralled in it having a tendency to draw others into the same melancholy and enslaving snares; hence every drunkard presents a *vortex* of temptation to the more temperate members of society, who are placed within the sphere of its attraction, and in whom the grace of God does not prevail as the proper and efficacious antidote.

The example of the drunkard, is indeed, at all times, calculated to excite the keenest feelings of reprobation and disgust, in the minds of reflecting and pious men; yet, in the present day, the vice of intemperance has become so familiar to the eye, that it appears to have lost, even to Christian contemplation, some of the most revolting shades of its awfully degrading character. If this were otherwise, it can scarcely be imagined that a vice so opposed in all its bearings to the principles and practices of Christianity, and so destructive to all moral respectability and worth, would be viewed with such apparent unconcern by the great majority of the Christian community.

The machinery now in operation to promote the sale of intoxicating liquors, and the consequences thereby resulting to the community are truly appalling, and are calculated to alarm the minds of all sincere followers of the self-denying Jesus. At a moderate calculation there are in England and Wales

* The Life and Persecutions of Martin Boos.

† Letter from the Rev. Mr. Scott, of Dublin, curate of St. Andrews.—Saunders's News Letter.

‡ Sunday in London, 1833.

not less than 100,000 of these establishments; a number, which amounts to nearly one to every twentieth house. In Ireland and Scotland, the number is often greater, and especially in the large towns. At a still more moderate calculation, there are not less than 500,000 or 600,000 *habitual drunkards* in the United Kingdom, in addition to a larger proportion of those, who, by the habits and practices of the nation, are gradually preparing to fill up the ranks of those individuals, who, by intemperance, have been rapidly hastened, or are now on their way, to a premature grave. In addition to this awful array of evil, may be included an incalculable amount of injury, resulting from the pernicious effects of evil example.

In opposition to this vast amount of hostility to the spread of the Gospel, may be placed not more than 20,000 places of religious worship, and not more than 30,000 individuals exclusively engaged in the promulgation of divine truth. Hence it will be seen, that in the present day, the agents actively employed to promote the kingdom of Satan, are actually about four times more numerous than the instruments by which salvation is announced to multitudes of perishing sinners. With these facts in view, can it excite surprise that the labours of Christian ministers and professors have hitherto been so little commensurate with the results which might otherwise have been anticipated? The contributions also made in support of the Gospel are trifling compared with the immense expenditure annually taking place on articles not only unnecessary to mankind, but in the highest degree pernicious and destructive to their temporal and eternal interests.

It has been estimated, that for the period of twenty years after the establishment of the Church Missionary Society, there was collected for it throughout the whole nation £250,000; while during the same period in this country, there was no less a sum than £375,000,000 expended in the purchase of ardent spirits.

The following estimate is made by Professor Edgar, of Belfast:—

At a moderate calculation the cost *every year* to the parish of Belfast, for distilled spirits alone, is £44,500.

The cost of four large charitable institutions for the relief and support of the destitute poor of Belfast, does not amount to more than..

£5,400 0

The support of ministers of religion, and other religious instructors in the same parish, does not exceed

4,500 0

The expense of the Royal College, of which Dr. Edgar is one of the Professors, to Government, is

1,500 0

£11,400 0

Supposing that the whole of this sum was paid out of the expense of whiskey, there still remains

33,100 0

Suppose that the parish contribute to Bible, Missionary, and other similar societies

1,100 0

The entire sum expended by the Sunday School Society on all Sunday Schools in Ireland, only amounts *per year* to

3,000 0

£4,100 0

Which being added to the former balance of £33,100, there yet remains out of the consumption of spirits in this single parish £29,000.

After bestowing a pension of £50 per annum to each spirit seller in Belfast, to prevent them from doing injury to their fellow-creatures, there would remain the sum of £12,500 every year, which would be sufficient to give £1 to every head of a family in the parish, for any useful or charitable purpose.*

In the year 1830, says the Rev. E. Bickersteth, the aggregate sum given to all the religious institutions put together, averaged but sixpence a year for each individual! The bare duties on British and foreign spirits, amounted to "*thirteen times as much!*"

Not more than half a million sterling, per annum, remarks Mr. Baker, is contributed to the support of all the religious institutions of the present day, which are designed to make an aggressive movement upon the empire of darkness and of sin. This is about a *sixth* part of what the inhabitants of London expend in Gin; a *sixteenth* part of what Ireland expends in *Whiskey*; and not more than *half* of what the inhabitants of Edinburgh, Glasgow, and Greenock, alone, devote to the same body and soul destroying poison!†

During the last year, observes the same writer, the *free* contributions to the Religious Tract Society, amounted to little more than half the sum which is sometimes expended in the *fitting-up* and *embellishments* of a single Gin-palace.‡ Exclusive of legacies, the sum contributed to this excellent institution was £5,741 4s. 6d.

In the three towns of Edinburgh, Glasgow, and Greenock, there were expended in the year 1829 one million sterling in spirituous liquors alone. This amounts to twice the sum expressly devoted to Christianize the world.

The police establishment of the metropolis of Christian England, costs nearly six thousand pounds more than is given to support the six principal societies established in London for the extension of the Gospel in Foreign Lands.

* Parliamentary Report, p. 68.

† Idolatry of Britain, p. 81.

‡ Idem, p. 81.

The Expenditure of the Church Missionary Society, London Missionary Society, and Wesleyan Missionary Society, last year amounted to - - 204,093 4 3

The expenditure of the Christian Instruction Society, District Visiting Society, and the London City Mission, to - - 6,326 2 5

£210,419 6 8

The Total Expenditure of the Metropolitan Police in 1836 - - - 216,313 15 5

Excess of Expenditure for the Police - - - 5,894 8 9

The purity of the Christian church has too long been impaired by the Bacchanalian practices with which it has been associated,

and the name of the Saviour brought into contempt by sensual and lukewarm professors.

The facts adduced in this section, suffice to show that the use of intoxicating liquors has, in all ages of the world, been the greatest of all obstacles to the diffusion of Christianity. Every lawful means, therefore, of removing this Anti-Christian curse ought immediately to be adopted, and earnestly prosecuted by every sincere follower of the Lord Jesus Christ. Personal sacrifice, if required, should be brought to bear on this all-important question. The important duty of example among Christians carries with it immense responsibility; and it is to this, in conjunction with their preceptive exhortations and authoritative influence, in subservience to the divine blessing, that the success of this great enterprise must be indebted, if it should ever accomplish its glorious object.

DIVISION THE SECOND.

SECTION I.

MORAL CAUSES OF INTEMPERANCE.

Is it a custom?

Aye, marry, is't;
But to my mind,—though I am native here
And to the manner born,—it is a custom
More honour'd in the breach than the observance.
This heavy headed revel, east and west
Makes us traduced and tax'd of other nations;
They class us drunkards, and with swinish phrase
Soil our addition: and, indeed, it takes
From our achievements though performed at height,
The pith and marrow of our attribute.—SHAKESPEARE.

I. Delusive notions of strong drink a cause of intemperance.—II. The praise of inebriating liquors by poets, a fruitful source of intemperance.—III. Ignorance and poverty, toil and care, causes of intemperance.—IV. The sensuality and earthliness of the community considered as a cause.—V. The association of indulgence with the social habits of life a prolific source of intemperance.—VI. Festive indulgence a common cause of intemperance.—VII. The practice of toasts and drinking healths, an occasion of intemperance.—VIII. Emulation in drinking and erroneous notions of hospitality considered as causes.—IX. The facilities afforded for the sale of intoxicating liquors and the allurements of publicans, common causes of intemperance.

I. INTEMPERANCE exercises a baneful influence on national and individual welfare. An investigation, therefore, of the causes which produce and foster this injurious vice, is of paramount importance, especially to those who suggest remedial measures. A primary cause of intemperance will be found to consist in the desire to alleviate bodily pain, or assuage mental anguish. Heedless of the consequences, the temporary relief which they afford induce mankind, on almost every ordinary occasion, to resort to the use of alcoholic stimulants. One prominent cause of intemperance is discovered in the delusive notions which have obtained, in all ages of the world, in relation to the beneficial properties of intoxicating liquors. These notions are not only materially strengthened by, but in a great measure depend upon, the immediate and agreeable effects which they produce on the animal powers. Like the waters of Lethe, they have been supposed to impart oblivion to the soul, and freedom from the anxieties and cares of life:—

—Anima quibus altera fato
Corpora debentur, Lethei ad fluminis undam
Securos latitantes, et longa oblivio potant.*

Virg. *Æneid* lib. vi. v. 71

II. The ancient poets materially contributed to the currency of this delusion. Horace, in one of his odes, contends that indulgence in wine is the most effectual method of driving away care and sorrow:—

—Neque
Mordaces aliter diffugiunt sollicitudines.*

That celebrated poet sounds the praise of intemperance in the following manner:—

“*Librietas quid non designat? opera recludit
Spes jubet esse ratas: in praelia trudit inertem.
Sollicitis animis onus eximit: addocet artes.
Facundi calices, quem non fecere disertum?
Contracta quem non in paupertate solutum.*”

Ovid also thus wreathes the cup with praise:—

“*Vina parant animos, faciuntque coloribus aptos.
Cura fugit, multo diluiturque mero.
Tunc veniunt risus, tunc pauper cornua sumit,
Tunc dolor et curæ, rugaque frontis abit.
Tunc aperit mentes, ævo rarissima nostro
Simplicitas, artes excecitate Deo.*”

The odes of Anacreon are familiar to every votary of Bacchus, and are constantly echoed in praise of wine. Athenæus, however, states, of the drinking songs of Anacreon, that he *feigned* them, and that he lived in a temperate manner.† His effusions, as well as those of Horace, abound with glowing encomiums on wine and its convivial associations, but rarely, if ever, do they present to their readers a faithful representation of the reverse side of the picture. The poets of old unfortunately embodied in attractive imagery, sentiments rather in accordance with the vitiated notions of the age in which they flourished, than in unison with the pure principles of virtue and morality.

The productions of modern poets are not less injurious in their tendency, and greatly contribute to the credit and support of this popular fallacy. Some writers identify the use of intoxicating liquors with the comfort and happiness of the more humble classes of society, and delight to associate it with all their festive occasions. Thus, by one writer, it is described as the poor man's

“Sweet oblivion of his daily care,”

while a flattering illusion is cast over the opposite picture of the endless miseries which result from unlawful indulgence. Bloomfield, in his popular poem, “the Farmer's Boy,” speaks of malt liquor as a “sovereign cordial;” and Goldsmith un-

* *Lib. i. ode 18.*

† *Demost. x. 7*

fortunately supports the same delusion. The latter writer thus laments the declining prosperity of the village ale-house :—

“ Low lies that house where nut-brown draughts
inspired,
Where grey-beard mirth and smiling toil retired ;
Where village statesmen talk'd with looks profound,
And news, much older than the ale, went round.
Obscure it sinks, nor shall it more impart
An hour's importance to the poor man's heart.”

A moment's reflection will convince the impartial mind of the injurious tendency of sentiments thus conveyed in captivating language, no less false in their sympathy, than pernicious in their influence. In this manner, however, the sanction of superior talents is too often lent to perpetuate a vice most odious in its character, and destructive in its effects.

The poetry of Burns, the Bard of Scotland, has contributed, perhaps more than any other of like nature, to perpetuate and strengthen the practice of drinking. He thus addresses *whiskey*, as the muse which inspired his lays.

“ O, thou my muse ! guid auld Scotch drink :
Whether thro' wimpling worms thou jink,
Or, richly brown, ream o'er the brink,
In glorious feam,
Inspire me, till I lisp and wink,
To sing thy name ! ”

The two succeeding verses contain strong encomiums on this fell destroyer of human happiness :—

“ Food fills the wame, an' keeps us livin' :
Tho' life's a gift no worth receivin',
When heavy dragg'd wi' pine and grievin' ;
But oil'd by thee,
The wheels o' life gae down-hill scrievin',
Wi' rattlin glee.”

“ Thou clears the head o' doited lear ;
Thou cheers the heart o' drooping care ;
Thou strings the nerves o' labour sair,
At's weary toil ;
Thou even brightens dark despair
Wi' gloomy smile.”

The next verse depicts in expressive language the estimation in which whiskey is held in his native land.

“ Thou art the life o' public haunts ;
But thee, what were our fairs and rants ?
Ev'n godly meetings o' the saints,
By thee inspired,
When gaping they besiege the tents,
Are doubly fired.”

Burns thus concludes,

“ Fortune ! if thou'll but gie me still
Hale breeks, a scone, and whisky gill,
And rowth o' rhyme to rave at will,
Take a' the rest,
And deal't about as thy blind skill
Directs the best.”

The writings of this poet abound with delusive praises of strong drink ; and it is not unreasonable to suppose that thousands of his countrymen, while admiring the beauty of his language, have imbibed notions, and adopted practices, which have proved injurious in their tendency, and fatal in their results. Hector M'Neil, a rhymster of the

same nation, thus deploras the tendency of Burns' verses ;—

“ Robin Burns, in many a ditty,
Loudly sings in whisky's praise ;
Sweet the sang ! the mair's the pity,
E'er on it he war'd sic lays.”

III. *Ignorance and poverty, combined with extreme toil and care, form a prolific and very general source of Intemperance.* Ignorance and sensuality are ever united. Men possessed neither of moral principle nor of intellectual strength, are but too prone to seek enjoyment in sensual gratification. The transitory pleasures of sense often engage the attention, and captivate the affections, while the nobler and more durable enjoyments of intellectual cultivation, are but too little estimated or relished.

Excessive toil and care form other powerful auxiliaries to intemperance. The lives of a large proportion of the operative part of the community are, in general, passed in mere animal exertion, with few opportunities, or even motives, for moral or intellectual improvement. The habitations of this class are too frequently found devoid of those domestic comforts which other branches of society possess. The duty of providing for a numerous family often presses heavily upon them, while, in many cases, there is but a scanty supply of labour for furnishing still scantier means of support. It can excite little surprise, therefore, that in too many instances these unfortunate individuals resort to such attractive means of temporary relief from their distresses, as may opportunely be presented to their notice, and placed within their reach. Fascinating inducements to intemperance are held out at houses established and licensed for the sale of intoxicating liquors. At these seductive abodes, the infatuated votaries of strong drink, endeavour, for a few moments, to banish the cares and sorrows with which they are depressed. An intelligent writer observes, “ that the moral inducements for drinking inebriating compounds, are much more prevalent than even the physical pretences.” “ The desire,” he further remarks, “ for oblivion of care, of irksome business and of laborious thought ; expectation of drowning sorrow, and of repelling misfortune ; the wish to feel ourselves prosperous, or to be flattered by pleasing hopes, are the chief reasons for desiring strong liquors.* Even individuals more elevated in the scale of society, it is to be feared, endeavour to obtain relief from toil and care by undue indulgence in sensual pleasure. It is a correct observation, that exhausting toils unfit the mind to withstand temptation, and a great portion of mankind are found but too willing to alleviate the ills of life with so soothing, but deceitful, an antidote, as is presented to them in the form of intoxicating liquors.

* Lecture on Fermented Liquors, by Sir A. Carlyle.

IV. Another cause of intemperance among the poor and labouring classes, is *the general sensuality and earthliness of the community*. "There is indeed," remarks a recent writer, "much virtue, much spirituality, in the prosperous classes, but it is generally unseen. There is a vastly greater amount in these classes of worldliness, of devotion to the senses, and this stands out in bold relief. The majority live unduly for the body. Where there is little intemperance in the common acceptance of that term, there is yet a great amount of excess. Thousands who are never drunk, place their chief happiness in the pleasures of the table. How much of the intellect of this community is palsied, how much of the expression of the countenance blotted out, how much of the spirit buried, through unwise indulgence! What is the great lesson which the more prosperous classes teach to the poorer? Not self-denial, not spirituality, not the great Christian truth, that human happiness lies in the triumphs of the mind over the body, in inward force and life. The poorer are taught by the richer, that the greatest good is ease, indulgence. The voice which descends from the prosperous, contradicts the lessons of Christ and of sound philosophy. It is the sensuality, the earthliness of those who give the tone to public sentiment, which is chargeable with a vast amount of the intemperance of the poor. How is the poor man to resist intemperance? Only by a moral force, an energy of will, a principle of self-denial in his soul. And where is this taught him? Does a higher morality come to him from those whose condition makes them his superiors? The great inquiry which he hears among the better educated is, 'What shall we eat and drink, and wherewithal shall we be clothed?' Unceasing struggles for outward, earthly, sensual good, constitute the chief activity which he sees around him. To suppose that the poorer classes should receive lessons of luxury and self-indulgence from the more prosperous, and should yet resist the most urgent temptations to excess, is to expect from them a moral force, in which we feel ourselves to be sadly wanting. In their hard conflicts, how little of life-giving truth, of elevating thought, of heavenly aspiration, do they receive from those above them in their worldly condition!"*

The spirit of excitement, which is natural to man, constitutes, when improperly directed, a powerful auxiliary to the formation of intemperate habits. The spirit of excitement, usually accompanied by the pride of emulation, is strongly exhibited in the customs and practices connected with drinking, as will be amply illustrated in the ensuing pages. No class of causes has so greatly contributed to foster intemperance as the vitiated customs and practices of society. Man, to a great extent, is the

the creature of habit. He adheres with almost invincible tenacity to the associations by which he has been surrounded from early years. It is, therefore, of infinite importance that youth should be early initiated into the acquisition and practice of good habits. Evil habits easily and naturally increase in strength. The poet remarks:

"Ill habits gather by unseen degrees,
As brooks run rivers, rivers run to seas."

V. *The association of indulgence in the use of intoxicating liquors with the intercourse of social life, forms a strong inducement to the formation of intemperate habits*. This injurious mode of cultivating the pleasures of society has unfortunately prevailed in almost all civilized countries, and in every age and climate of which the records have reached our own.

In the present day scarce any important event can be passed over without the introduction of what is called "the social glass." Each progressive period in the life of man, commencing from his birth, and extending to his death, is more or less associated with the introduction of alcoholic liquors. *Marriage* is seldom celebrated without the seductive aid of the spirit or wine bottle; the *birth of a child* is hailed by the introduction of the social glass; the several events of *christening, coming of age*, and other equally important periods in the life of man are similarly celebrated; and even the last solemn ceremony of *burial* is too frequently desecrated by vinous indulgence. These occurrences have, in innumerable instances, been made sources of gross intemperance. Even those individuals, who, in general, view intemperance with disgust, look upon it at these periods as less venial in its character. In the course of life, these occasions become frequent, until unfortunately, in too many instances, the dreadful habit of drunkenness is formed! Illustrations of intemperance on all these occasions might be multiplied to a considerable extent: a few must suffice.

History presents to us many examples of serious evils arising from the use of intoxicating liquor at *marriage feasts*. In some classes of society, the marriage of a relation or friend, is not regarded as properly celebrated, unless the parties become intoxicated. Stowe relates, that in the year 1446 there was a wedding near Zeghebuic, celebrated with such intemperance, that no less than nine-score persons, men and women, died of excessive eating and drinking.

In the beginning of the seventeenth century, a riot took place at Thurgau, Switzerland, which originated in a drunken brawl at a wedding. Very considerable mischief was occasioned thereby, and for the time being, the law and constituted authorities were set at defiance.*

Our familiar expression *honey-moon*, is

* An Address on Temperance, by Wm. E. Channing, D.D.

* Zschoke's Switzerland, p. 220.

derived from a practice in vogue in former times, that of drinking metheglin, a kind of mead made with *honey*, for thirty days' feast after grand weddings.

Coming of age.—The following awful occurrences took place, July, 1830, in a certain part of Scotland. A gentleman of large estates, whose name in charity is screened from public notice (although announced in the papers of the day,) gave a large feast on his coming of age, of which the workmen and certain others partook. A large ox was roasted and placed in the middle of the square. "The company took their seats about two o'clock in the afternoon, and then commenced the cutting up and distributing of the ox, to which was added an unlimited supply of porter, strong ale, and whiskey. *Four half hogsheads of porter, and six of strong ale, with about sixty gallons of whiskey, were provided for the occasion.* When the party had sufficiently regaled themselves, and had often devoted copious libations to the happiness of their generous employer and his amiable lady, they quietly dispersed. No sooner had the company already mentioned left their seats, than the spectators took possession of them, and the work of jollification went on briskly. Nor were the intoxicating draughts confined to those who encompassed the immense rustic table; pitchers of whiskey, mixed with strong ale and porter, were served out in the most liberal manner to all who chose to participate in them. The consequence was, that in a very short time hundreds were in a state of deep intoxication, and hand-barrows and carts were instantly put in requisition to convey them to their several habitations. On the roads from Bannockburn Muir, in every direction, people were found lying perfectly helpless. One man states, that between Bannockburn and Stirling, he loosened the neckcloths, and placed in elevated positions, no less than eight individuals, evidently in danger of suffocation. But the scene around the table baffles description. Some ran thither to assist fathers—others to help sons;—some to aid brothers—others to succour husbands—and not a few others to bring away frail wives. It frequently happened too, that those who proffered assistance to others were prevailed on to "taste the liquor," and therefore soon stood as much in need of aid themselves as those to whom they meant to extend it. Men, women, and children, were to be seen staggering about in inimitable confusion, tumbling over each other with the utmost unconcern, and lying by scores in every direction, neither able to tell their names nor their residences. On Sunday morning, parties were out in all directions, looking for relations and friends, and removing them from the highways that they might not be observed by people going to church. No fewer than three individuals died from the effects of excessive drinking, not to mention several others who narrowly

escaped a similar fate from the same cause, having been obliged to be repeatedly bled, and afterwards attended by medical men. The three victims to this debauch were all stout young men in the prime of life." *

Burials.—The following melancholy picture is extracted from a work published in Scotland, entitled, "Some Account of the State of Morals and Religion in Skye, in 1805, and the period immediately previous to it;"—

Assemblies for dancing were frequent among them, and as they were accompanied with the drinking of ardent spirits to excess, they almost invariably ended in quarrels and scuffles. Nothing can serve to give a clearer idea of the extent to which the vice of drunkenness abounded among them, than a description of the barbarous manner in which their funerals were conducted. Some were free enough to acknowledge *that they experienced delight at hearing the death of a man or woman, because of the prospect it afforded them of getting their fill of whiskey.* The friends of the deceased were particularly anxious to solemnize the funeral with a great feast. This was what they called burying their deceased friend *with decency.* Hence they wasted, not only unnecessarily, but most wantonly, a great quantity of liquor and victuals on those occasions. This woe-ful and barbarous practice was so general, and of so long standing, that persons, when arrived at old age, manifested a great anxiety to lay by a certain sum of money against their funeral. And upon their death-beds, while indifferent upon the state of their souls, they would not forget to order matters regarding their funerals; often expressing, *"that they should not be happy unless men were drunk and fought at their funerals."* Their surviving relations would not neglect to attend to their dying requests. For honour's sake this barbarous custom must be complied with. Not to do so, was incurring much disgrace. Hence, many who were poor in circumstances, in order to attend to it, ran themselves deep into debt, which some of them were never able to discharge. Surely, it was a spectacle calculated to awaken deep regret in the bosom of an enlightened and benevolent Christian, to behold the distressed widow in the most destitute circumstances, going without shoes or head-dress, with six, seven, or eight ragged and starving children; while perhaps her only cow must be disposed of to procure whiskey to make her neighbours drunk, and fight one another. Although the people, on other occasions, would walk twenty or thirty miles without either food or drink, yet, at funerals, the persons assembled must be treated to excess, though the place of interment should not be a mile distant. Scores of men must be invited; and every man served with four or even five glasses of strong whiskey, and

* Public Papers, June 7th, 1830.

some food before they moved. Horse loads of bread and cheese, dressed fowls, beef and whiskey, went along with them to the burying ground. The funeral procession marched in good humour, preceded by a piper, to the place of interment. When the grave was secured, they sat down in some convenient place in the open air, but not unfrequently in the church, when the minister happened to be so generous as to grant his permission. The feasting then commenced. The rulers of the feast were always most pressing in their liberality. A number of uninvited persons were sure to make their appearance; they were served separately. Bread and beef were tossed in the air that they might alight among the boys, to produce scuffling among them, to the no small amusement of the assembly, and to the great honour of the deceased! As the drinking advanced, they became wildly obstreperous and tumultuous, so that the clamour might be heard at a great distance. When the day was far spent, and the excessive drinking of ardent spirits had produced general intoxication, fighting and bloodshed ensued. The men of different clans would form themselves into parties, and would furiously attack each other. Many would be so overcome with drunkenness, that they could not move. The *grosser* the transactions of the day, it was considered the more *honourable*, and a more lasting monument to the memory of the deceased. At a gentleman's funeral five or six ankers of whiskey would perhaps be consumed. Most of the ministers would countenance this barbarous custom with their presence, and none of them ever made any vigorous effort to suppress and abolish it."

The author of this interesting publication states that since the period alluded to, the introduction of the gospel has created a great improvement in the morals of the people. In some places of the Isle of Skye, however, and in many parts of the Highlands, the same demoralizing practice is still carried on.

The habit of drinking throughout Scotland is intimately connected with every relationship of life. "A system of rule and regulation," observes a gentleman who has minutely investigated the subject, "as to times and occasions of drinking, pervades all branches of society in Scotland; at meals, markets, fairs, sacraments, baptisms, and funerals; and almost every trade and profession has its own code of strict and well observed laws on this subject; most other countries have on the whole, only one general motive to use liquor, namely, natural thirst or desire for it; but in Scotland there exists a large plurality of motives, derived from etiquette and rule. There has been constituted with us a conventional and artificial connexion between liquor and courtesy and business; and this unnatural conjunction, is not, as in some other cases, occasional, but nearly universal."*

In Ireland very similar customs are observed. The feastings usually held at "*wakes*," as they are called, form a fruitful source of demoralization. Frightful quarrels and bloodshed are the common consequences. This custom had an early origin. In Mr. Hardiman's "*Ancient Deeds*," p. 80, is given the translation of an Irish award, made in 1592. It mentions, among other matters, that Loughlinroe is entitled to "a great cow, which was killed for the funeral of John M'Murrough O'Slattery, together with all the wheat and *liquor* provided for the same."

In some parts of England similar practices exist.

Intemperance at feasts.—A lamentable example of this kind occurred in the City of Petersburg, Russia, in 1779. "One of the farmers of the brandy duty, who had made an immense fortune by his contract, proposed to give a feast to the inhabitants of the city, in testimony of his gratitude to those who had enriched him. The victuals, the beer, and the brandy, which he caused to be served, cost him 20,000 rubles! The populace flocked in crowds to the place adjoining to the summer gardens, where he gave this enormous repast; and in spite of the precautions that had been taken, disturbances soon arose among this motley throng of guests. The contentions first began about the places, and the better kind of provisions spread upon the board: from struggles and noise they proceeded to blows. Several persons were killed; others became so intoxicated that they fell asleep in the streets and perished from the severity of the weather. The number of people who lost their lives amounted in all to at least 500!"*

The practice of "*friendly treats*," is a frequent source of intemperance. An individual meets with a friend, and cannot separate without inviting him to "take a glass at his expense." Old times are talked over, and very frequently, a second and a third glass is introduced, until inebriation is the consequence.

The same injurious practice is almost invariably adopted in the making and concluding of a "*bargain*," as it is termed. If an individual wishes to make a purchase, an adjournment is proposed to an adjoining hotel, and in general, previously to an agreement between the parties, a stipulation is made, that a certain quantity of drink shall be included.

A similar practice almost universally obtains on occasions common in various branches of trade. "*Footings*," and penalties of a like nature, are from time to time exacted.

Mr. Dunlop, in a work of great value, recently published, entitled, "*The Philosophy of Artificial and Compulsory Drinking Usages in Great Britain and Ireland*," enters at length into these pernicious habits. In this interesting volume no less than 297

* Evidence of J. Dunlop, Esq., Par. Enq. p. 399.

* Life of the Empress Catherine II. vol. ii.

drinking usages are specified. Mr. Dunlop has since discovered more than fifty additional ones.

The evidence of this estimable writer shows that there has been constituted in Britain a conventional and artificial connexion between liquor and courtesy and business; which unnatural conjunction, he informs us, is not, as in some other places, occasional, but nearly universal; and it has become a perfect science to know its multiplied modifications in every department of civil and domestic life. Mr. Dunlop's work ought to be read by every lover of the human race.

A very fruitful source of intemperance is found in the practice of handing round bowls of punch or whiskey at *auctions* and similar occasions. This is done with the intent of so elevating the feelings, as to induce individuals to make unwary purchases. This practice is carried on in country places to a considerable extent. An auctioneer would anticipate a very poor sale did he not place before his audience a quantity of stimulating liquor.

The tithe sales in Wales are said to be conducted in a similar manner. The following Examination of Mr. Owen Roberts, Surgeon, Caernarvon, North Wales, before the Parliamentary Committee, 1834.

Question.—Are there not in Wales frequent meetings of people, accompanied by great intemperance among them; sales, auctions, and things of that nature?

Answer.—Yes, there are, and the manner in which the tithes are let, tends most materially to encourage and increase immorality and drunkenness. The tithes of each parish are divided into many small parcels and let once a year by auction. In the morning part of the day, the owner of the tithe, or his agent, whether bishop, rector, perpetual curate, or vicar, gives a dinner or treat to the persons who are paying for the last year's tithe; after the money has been received, and while they are at dinner enjoying themselves with pipes, punch, and ale, the persons in another room, where the auction is to take place, are plied with ale, tobacco, and punch, till sufficient excitement is produced; the auctioneer is brought forth; different parcels are set up lot by lot; every person bidding for a lot is handed a cup to drink, either punch or ale, after each bidding; and many a one is often surprised on being congratulated the next morning as the taker of one, two, or three parcels of tithes. I have seen respectable ministers handing the drink about as well as the most expert waiter in any tavern in town."*

A few years ago, an individual, resident in Bolton, Lancashire, made the following statement:—At a sale which took place near that town, gin and ale were so plentifully

distributed, that a sofa, which cost the person £1 19s., sold for upwards of £3; a set of bedsteads, which cost £2 3s. when new, sold for £3 5s.; and so on. A person engaged in this transaction stated it as his belief, that every quart of gin given, produced to the seller an advance of £2. He moreover was of opinion, that at the close of the sale, the last quart given made him upwards of £5. The same individual makes the following remarks on the sale at which he was present:—At the commencement there was no gin and the sale was very flat; they found after they had been selling some time that they could not get on: the auctioneer stopped. A quantity of gin was sent for, which was served round very freely several times. The sale again commenced. The result was "a glorious sale." A small heifer, considered to be worth about £7 or £8, at the utmost, sold for £15 16s., and other articles in proportion.

In the reign of Canute, Atheric, a dignitary of the church, made a Danish nobleman drunk, and while he was in that state, bought a fine estate of him for a mere trifle, which he afterwards granted to the abbey of Ramsey.*

Commercial Travellers assert, that they would be unable to do business with a certain class of customers, were it not for the aid of intoxicating liquors. By this means advantageous sales have not unfrequently been made.

Travellers themselves are peculiarly prone to vinous indulgence. "Well fed, riding from town to town, and walking to the houses of the several tradesmen, they have an employment not only more agreeable, but more conducive to health than almost any other dependent on traffic. But they destroy their constitutions by intemperance; not generally by drunkenness, but by taking more liquor than nature requires. Dining at the traveller's table, each drinks his pint or bottle of wine; he then takes negus or spirits with several of his customers, and at night he must have a glass or two of brandy and water. Few commercial travellers bear the employ for thirty years—the majority not twenty."†

Innumerable examples might be adduced in proof of the intimate and widely spread habit of using intoxicating liquors, even on the most trivial occasions. The value of the stores found in the cellars of the various Club-houses in London, may be adduced in evidence of the estimation in which wine is held, by a portion, at least, of the higher classes in the metropolis. Carlton club £1500; United University Club, not much under £2000. The Literary and Scientific Athenæum, £3500 to £4000. The Union Club appears to exceed the rest in the con-

* Parliamentary Evidence, 1834, pp. 158-9.

* Hist. Eliens, p. 441, Henry's England, vol. iv. p. 302.

† Thackrah on the Effects of the Principal Arts, Trades and Professions, p. 83.

tents of its cellars, which, remarks the writer from whose work we extract this information, "disguise it as people will, is the most important matter after all." The stock of wine, (the Chairman declares it to be an under-estimate) according to a recent valuation, amounts to £7150. The Junior United Service Club, values its stock of wines at £3722. Those of the United Service Club are worth, it is said, £7722. "A cellar so amply furnished, must be no small recommendation to the club. It accounts for the extraordinary anxiety manifested by certain gentlemen to be admitted as members."*

The Gambling-houses of London (technically) denominated "*hells*," exceed all other establishments in their stock of wines. There is a close and almost inseparable connexion between gambling and drinking. Crockford's, in St. James' Street, cost in its erection nearly £60,000. The furnishing of this establishment cost in addition £35,000. Its cellar contains wines to suit every diversity of taste. It is kept by Crockford's son, and is valued at £70,000. It measures 285 feet in length. Independently of innumerable hogsheads, the number of bottles on the shelves amount to 300,000. The author of the "*Great Metropolis*," was at a loss to know how with 750 subscribers (the subscription, moreover, only twelve guineas per annum, in addition to an entrance fee of twenty guineas,) Mr. C. could afford to give superb suppers in the saloon to those of the members who chose to make of them, *without any additional charge*. The matter, however, was soon explained. "With regard to those who enter the hazard room, I saw at once the policy of *plying them with the choicest wines*, and with a sufficient quantity of them, because, where the wine is in, the wit," according to the proverb, 'is sure to be out,' and men are then, of course, in the best of all possible conditions to risk their money, and and play too, in such a way as is most likely to result in their losing it:" again—"a superb supper," with a liberal supply of the choicest wines which London can afford, often inspires a disposition to gamble, when nothing else will. Nightly observation teaches the proprietors of these establishments, that the transition from the supper in the saloon to the hazard table, is as natural, as is the transition from the latter to utter ruin."* Space will not admit of further detail.

VI. *Free indulgence in intoxicating liquors at public feasts and other similar entertainments, contributes very much to the formation of intemperate habits.* The vice of intemperance is greatly fostered at public and other feasts. In this respect the customs of ancient and modern nations bear great similarity. A characteristic ex-

ample of this practice is witnessed in what may very properly be called *feasts of consultation or deliberation*. This custom appears to have been of early date, and probably originated in the supposed powerful influence of wine in aiding deliberation. Among the ancients many important matters were arranged at meetings of this description. The Persians, for example, were in the habit of deliberating on "matters of the highest moment when warm with wine."* The Germans also discussed affairs of the greatest importance at their feasts; and in particular, those which related to warfare. Both these nations, however, appear to have been conscious, that such occasions were not the most proper for calm decision, for, in general, the morning after the debauch, the same matters received further consideration.†

The ancients very generally held triumphal feasts for victories gained over their enemies, which may be denominated *feasts of victory*. This custom had also a primitive origin. Thus, David obtained a decisive victory over the Amalekites: he came upon them suddenly while they were holding a feast after the successful pillage of Ziklag.‡ Ahab found Benhadad, king of Syria, with thirty-two other kings feasting, and obtained a complete victory over them.

Intemperance was exceedingly common among the Celts, who held feasts on almost all civil and even religious occasions. The Danes in particular were given to intemperance at their feasts. Frequent carousals were held for this purpose.|| Similar practices are found to exist among modern nations, whether civilized or barbarian.

In our own country, the common practice among political and other parties, of holding feasts, in order to give expression to the opinions of a number, has a similar origin. In the present day, it is quite common to hold dinners on important political occasions, where the strength of a party is concentrated, and the views of the whole are supposed to be in unison.

The dinner given in 1835, to Lord Durham, at Glasgow, presents a striking example. It was characterised by drunkenness and disorder. Lord Durham himself was grossly insulted, in one of the most pathetic parts of his speech, and obliged to sit down until the tumult was quelled. After his Lordship's departure, the chairman in vain attempted to procure order or obtain a hearing, and although several toasts on the printed lists had not been given, he abandoned all further efforts, and dissolved the meeting.

A similar coincidence is perceived in feasts which are held in commemoration of some victory in war or politics; and in honour of eminent individuals, whether

† The Great Metropolis, London, 1836.

* Ibid. 1836.

• See Section, ii. p. 20.

† Ibid, p. 25.

‡ 1 Sam. xxx. 16-20.

|| Hamlet. Act III. Scene 4.

monarchs or heroes, whose lives have been devoted to the service of their country. All of these are usually celebrated with great intemperance. A host of anniversary meetings of this description might be cited. The Pitt, Fox, and other similar political dinners; the annual assemblies of various public societies; and in particular, the birth-day festivities of our sovereigns, commonly present to our notice scenes of gross intemperance.

The elections of members of parliament have long been notorious for the intemperance with which they have been accompanied. In some districts, during the continuance of these elections, the streets are crowded with drunkards, riots ensue, and not unfrequently lives are lost.

The various corporation and other civic feasts have been equally notorious for indulgence in strong drink. A humorous example which took place in the reign of Queen Elizabeth, is given in Beatniffe's Tour in Norfolk. The stock of wines in the possession of the old Bristol corporation, (see advertisement of its sale,) comprised no less than 6300 bottles, "selected with the nicest care and judgment, for civic hospitality"—(drunkenness.)

The manner in which these various feasts have been conducted, almost entirely precludes the possibility of maintaining sobriety. Among the Greeks and Romans it was customary at every feast to appoint a governor, or president, as he would be now called in England, whose duty it was to see that the laws of drinking were properly observed, and that each individual took his full share of the inebriating draught. At Athens, public officers were appointed for this purpose: *καὶ ἐφεώρων εἰ κατ' ἴσον πίνουσιν οἱ συνόντες* who were called *δινόπται* and at other times in a metaphorical sense, *ὀφθαλμοί*, *eyes*. Those individuals who refused to drink their full share were necessitated to depart. This was in accordance with the well-known law of such meetings, *ἢ πιθὶ ἢ, ἀπιθὶ*, either *drink or begone*. The manner in which this law was estimated among these nations, may be known by the remarks of Cicero: "To me," saith he, "it seems but reasonable, in the affairs of life, to observe the same law which the Greeks keep at their entertainments—*either let them drink*, (say they) *or depart*—very right, for one should either partake of the pleasure of drinking and being merry, or leave the company.*

The strictness with which the laws of drinking were observed, gave occasion to Cicero to reproach an individual that *qui nunquam populi Romani legibus paruisset, iis legibus quæ in poculis ponebantur obtemperabat*,—he who never had submitted to the laws of the Roman people, should yield obedience to the laws of drinking.†

Among other customs observed at Grecian feasts, was that of drinking to heroes and

persons of quality, in large vessels. The words addressed by Agamemnon to his guest Idomeneus, King of Crete, well illustrate this practice:—

"Though all the rest with stated rules we bound,
Unmixed, *unmeasured*, are thy goblets crowned."
POPE.

Athenæus, among other examples, makes mention of a vessel so large that it was almost too heavy to be carried by a young man. The same author, however, remarks, that though men of great estates and quality, in his time, used large cups, it was not anciently the practice of Greece, but lately learned from barbarous nations, who being ignorant of arts and humanity, indulge themselves in the immoderate use of drink, and all sorts of dainties; whereas it does not appear, says he, from the testimony of those who lived before our times, that a cup of a very large size was ever made use of in any part of Greece, except those which belonged to the heroes.*

After supper it was usual to introduce cups of a larger size than those which had been previously used.

"Postquam prima quies epulis, mensæque remotæ,
Crateras magnos statuunt, et vina coronant."—
VIRGIL.

It was customary, among the Greeks and Romans, to wear crowns or garlands, during the continuance of their feasts. These were not considered as ornaments merely, but were supposed to prevent speedy intoxication. Each guest, after supper, was provided with one of these singular appendages, previously to his partaking freely of wine. Among other varieties of crowns, described by Athenæus and contemporary writers, was one called *Tumultuaria*. It was placed on the head of the drunkard. Of this description is the one which Plautus alludes to when the servant declares that he will put a crown on his head and feign himself drunk.

"Capiam coronam in caput, assimulabo me esse ebrium."

On these occasions, it was also usual to anoint their heads with ointments and perfumes, which, like the *Coroniæ*, were supposed by their cooling properties, to prevent the evil effects which arise from vinous excitement.

A skeleton, or the representation of one, was commonly introduced by the ancient Romans at their feasts. This practice is said to have been instituted in imitation of the Egyptians. The governor of the feast was accustomed to look at this repulsive object and utter these words, *vivamus, dum licet esse bene*, let us live while it is permitted us to enjoy life. *Πινε τε καὶ τερπεν, εσσεαι γὰρ ἀποθανὼν τοιούτος*, *drink and be merry, for thus shalt thou be after death.*† Some writers suppose, however, that these

* Vide Potter's Grecian Antiquities, vol. ii. lib. iv. c. ii. p. 389.

† Herod. ii. 78. s. 74. Plut. Conv. Sapient 6. Petr. 34.

* Tusc. Quæst. lib 5. † Cicero. orat. in verrem.

practices were instituted to remind those present of death, and the importance of a due regard of their latter end. The Scythians, we are told, were accustomed to drink out of a skull.

VII. No one cause has contributed so much to the formation of intemperate habits, at festive entertainments, as the practice of *health drinking*; and, in more modern times, the custom of drinking toasts, which has indeed, in a great measure, superseded the former. It dates its origin from a very early period. The customs of the Greeks and Romans, in respect to health-drinking, bear great similarity to those of the present day. The plea of reverence to the gods, and remembrance of absent friends, among these nations, was the common inducement to free drinking. The habit of drinking wine unmixed with water, first to the gods, and then to absent friends, was termed by Cicero,* "*Græco more bibere*," or, to drink *after the Greek fashion*. A favourite custom among these people was to drink healths to their absent mistresses. As these healths were popular, they were drunk with proportionate honour. It not unfrequently happened, that the number of cups drank equalled the letters in their mistresses name. Thus in Martial,†

"NAEVIA Sex Cyathis Septum JUSTINA bibatur."

This practice, however, was not confined to the honour of the ladies. The health of *Cæsar*, for example, was celebrated with six glasses, while that of *Germanicus* was honoured with ten. Thus, also, with regard to others. In course of time, the number of glasses drunk was considered an indication of the respect entertained by the proposer towards the honoured individual. Numerous other popular toasts are recorded by ancient writers. The muses, for example, being nine, a proportionate number of cups were drunk to their honour; but those who wished to exhibit their moderation, confined themselves to the graces. Horace thus describes this practice:—

"Here's a bumper to midnight; to Luna's first shining;

A third to our friend in his post of divining.

Come, fill up the bowl, then fill up your bumpers,

Let three or thrice three, be the jovial of numbers.

The poet enraptured sure never refuses

His brimmers thrice three to his odd numbered muses.

But the graces, in naked simplicity cautious,

Are afraid, more than three might to quarrels
debauch us." FRANCIS.

The arbitrary customs of drinking were opposed in the court of Ahasuerus. "And the drinking was according to the law; none did compel: for so the king had appointed—that they should do according to every man's pleasure."‡ A similar custom prevailed among the Lacedæmonians.

St. Ambrose exclaims in strong terms against the temptations to excess commonly

practised in his times. After a striking illustration of the mode in which their feasts were conducted, he says, "If a man in war finds himself too weak, he turns his arms and deserves a pardon; but here, if any man gives up, or turns his cup, he is urged to drink." In your banquets, if a man take off his hand from the wine, it is poured into his mouth. All are drunk; the conquerors and conquered do all lie down drunk.* St. Ambrose, in a subsequent place, inveighs against the unlawful and arbitrary practice of drinking healths.†

Lord Coke informs us, that the Ancient Britons, had a similar custom:

"Ecce Brittanorum mos est laudabilis iste,
Ut bibat arbitrio pocula quisque suo.‡

The origin of the Wassail bowl is intimately connected with the practice of health-drinking. Mr. Brand, an English antiquarian of great learning and research, states, on the authority of Thomas de la Moore,|| and old Havillan,§ that *was-haile* and *drinc-heil* were the usual ancient phrases of quaffing among the English, and synonymous with the "Come, here's to you," and "I pledge you," of the present day.

The annual custom of handing round the wassail-bowl, according to Geoffrey of Monmouth and other writers, had its rise in the following circumstance. Hengist, the Saxon general, invited Voltigern to a feast. Rowena, daughter of the Saxon, by command of her father, entered the banquet-hall with a bowl of wine, and thus welcomed the British king—"Loverd king wass-heil," that is, *Be of health, Lord King*. The British monarch, through the medium of an interpreter, replied, "Drinc heile," or *drink health*. This, according to Robert of Gloster, was "in this land the first was-heil." The poet thus relates the circumstance:—

"Health, my lord king, the sweet Rowena said;
Health, cry'd the chieftain, to the Saxon maid;
Then gaily rose, and 'midst the concourse wide
Kiss'd her hale lips, and plac'd her by his side:
At the soft scene such gentle thoughts abound,
That health and kisses 'mongst the guests went
round;
From this the social custom took its rise,
We still retain."

This occurrence took place nearly 1400 years ago. Since that period, the practice of handing round the wassail-bowl, has been more or less intimately associated with the drinking usages of this country.

The practice of drinking healths was interdicted at the court of Louis XIV., of France, in consequence of its strong inducement to the formation of habits of intemperance.

Sir Wm. Temple, during a diplomatic visit to the Bishop of Munster, was witness to a remarkable example of health-drinking,

* Ambrose de Helia etc. cap. 13.

† Ibid. cap. 17.

‡ Coke's Instit. iii. c. 96.

|| Vita Edw. II. § In Architren. lib. ii.

* Orat. iii. in verrem. † Lib. i. Epigram. 72.

‡ Esther i. 8.

which he denominates "the most episcopal way of drinking that could be invented." The bishop called for wine to drink the king's health. "They brought him a formal *bell*, of silver gilt, that might hold about *two quarts* or more—he took it, pulled out the clapper, and gave it to me, whom he intended to drink to, then had the bell filled, and drank it off to his majesty's health! then asked me for the clapper, put it again into the bell, and rang out a loud peal to show he had played fair! This jolly peal was rung by every gentleman in the hall, myself excepted, who could never in my life manage more than *one quart* of wine at a draught." This circumstance is recorded in a letter written by Sir Wm. Temple to his brother, during his embassy from Charles the Second, to the Bishop of Munster.

Howell, in his "Familiar Letters," records that Christian IV. King of Denmark, who was notorious for his bibulous propensities, at one entertainment at Rhensburgh, 1632, gave thirty-five toasts, after which, his attendants, who imitated the conduct of their monarch, were necessitated to remove him in his chair. The citizens of London, acquainted with this king's inglorious propensity, as an appropriate offering, presented him, in solemn state, with a massive drinking cup of gold.

During the seventeenth century, drunkenness increased to an alarming extent in North Britain. The Church of Scotland, by an Act of the General Assembly, passed June 1646, forbade the practice of drinking healths among its members.* That many reflecting ministers of the Church of England also viewed this practice with some degree of alarm, may be seen from the following remarks by a zealous member of the establishment:—"To exceed the bounds of temperance by many degrees, without reclining; to entice others to it, to force them to drink healths (that ungodly practice,) which could not in the least promote another's health, but was likely to destroy their own, *through the excess which such practices do introduce.*" &c.†

The practice of health-drinking and toasting, has, since that period, been denounced by wise men as fraught with evil consequences, and has been invariably deprecated as one of the greatest incentives to drunkenness. The learned *Thomas Gataker*, in his epistle prefixed to *Mr. Bradshaw's* Sermon, called "*The Marriage Feast*," thus remarks:—"Also to let pass the brutish and swinish disposition of those that think there is no true welcome, nor good fellowship, as they term it, unless there be deep carousing of healths to the bride and bridegroom, and

every idle fellow's mistress, till the whole company's wits be drowned in drink, that not religion only, but reason be wholly exiled, and the meeting itself be rather called a drunken match, than a *marriage feast*."* "The ingenious and Rev. *Samuel Ward, of Ipswich*, gives cases of six or seven that died after the drinking of healths; and prescribes as the best means for ruining *drunkenness*, if great persons would first begin thorough reformation in their own families, banish the spirits from their butteries, abandon that foolish and vicious custom, as *St. Ambrose* and *Basil* call it, of drinking healths, and making that a *sacrifice to God* for the health of others, which is rather a sacrifice to the devil, and a bane of their own."† *Mr. James Durham*, in his *Exposition of the Commandments*, Com. vii. says, "It is an uncouth and strange thing, and even unnatural, that neither a man's appetite, nor his health, nor the time of the day, nor his ordinary diet, shall be the reason, or occasion of a man's drinking, or the rule whereby to try the convenient *when* or *season* of it; but whenever a man shall make such and such a bargain with me, or pay me for it, or get payment from me of such and such things, *that* must be the rule of my eating and drinking! What beast would be thus dealt with? There is a drinking of healths—by this means forcing, tempting, or occasioning drinking in others; this is one of the highest provocations of drunkenness. What can be the use of drinking healths? It was a notable saying of a great man, solicited to drink the king's health, 'By your leave, I will pray for the king's health, and drink for my own.' This practice will probably be found to have arisen from heathen idolaters, who used *libamen Jovi, Baccho*, &c. It is certain there is no vestige of it in Christianity, nor any reason for it." The learned *Dr. Ames* strongly reprobates health-drinking as a rite of *Bacchus*:—"We must abstain from all those rites by which drunkenness is wont artificially to be promoted: of which kind are adjurations of others *by great names, or the names of such as are dear*, to empty cups; the sending about of cups to be taken off by all alike: the abuse of lots, (as they use in some places by dice put into a jug or cup, instead of a rattle, or by a mill affixed to a jug pot) according to a fictitious law (not written,) and laying a necessity upon the guests. And from all other the like *mysteries* of *BACCHUS*, and manuductions to excess of drinking."‡

The intemperate character of the English, Scotch, and Irish, at their public feasts, has frequently been remarked with surprise by natives of more sober countries. Count

* Act of General Assembly, 13th June, 1646. No. XI.

† "God's terrible Voice in the City, in the History of the two late dreadful Judgments of the Plague and Famine in London, by the Minister of St. Mildred's." 1667.

* Extracted from a work entitled "The Great Evil of Health Drinking." 1684.

† Ibid. p. 25.

‡ Case. Consc. lib. iii. cap. 16.

Edouard de Melford thus describes the custom of health-drinking as recently practised at a national banquet of Scotchmen in Edinburgh, the guests of which mostly belonged to the higher ranks of society. "At the dessert, all the toasts usually given at public dinners were drunk. 'The King,' followed by nine hurras, with a pause for breath between each three rounds. The Chairman in a few minutes gave 'The health of the Royal Family,' which had its three hurras. That of 'The Army,' 'The Navy,' and 'Scotland,' followed; and were each received and saluted in the same manner.

"If you will take the trouble of counting, you will see that, as at each health a good glass of wine was drunk, by the time Scotland was duly honoured, we had swallowed down five (without speaking of the various libations of champagne and other sorts which during dinner had already taken the same road,) besides screaming hurras twenty-one times! But they did not stop there: one of the company proposed another glass in honour of the 'Thistle;' another proposed, as is customary, the health of the chairman; and he, after having returned thanks with an ease and readiness that showed him long used to such doings, all at once, without seating himself, proposed—judge my surprise and alarm—my health!" The worthy Count does not inform his readers how many "healths" were drunk after this circumstance had taken place, but it is not unlikely that numerous other libations would be made in honour of the distinguished individuals present on the occasion.

The absurdity of this dangerous practice is still further exhibited by the German Prince Puckler. "It is not usual," he remarks, "to take wine (during dinner in England) without drinking to another person. When you raise your glass, you look fixedly at the one with whom you are drinking, bow your head, and then drink with great gravity. Certainly many of the customs of the South-Sea Islanders, which strike us the most, are less ludicrous. It is esteemed a civility to challenge any body in this way to drink: and a messenger is often sent from one end of the table to the other to announce to B. that A. wishes to take wine with him: whereupon each, and sometimes with considerable trouble, catches the other's eye, and goes through the ceremony of the prescribed nod with great formality, looking at the moment very like a Chinese mandarin. Glass jugs filled with water happily enable *foreigners* to temper the brandy which forms so large a component part of English wines."

Of an English dinner, Professor Raumer thus remarks:—"Though I passed all the strong wines, and drank but few of the healths or toasts, I yet drank too much. This was almost inevitable from the want of any drink for quenching thirst."

In this country, unfortunately, health-drinking is in some degree patronised by the female portion of society. Mr. Dunlop informs us that in Scotland, in the great majority of cases, ladies still drink healths in brandied wines, *in the earlier parts of the day*. If ladies, who reside in a town in Scotland, walk a hundred yards from their own doors, and pay a forenoon call or visit, they must, in general, be received with a bumper of brandied Port or Madeira.* Contrast this practice with that of the *ladies* of Vienna. "Among the circles of the highest *ton*," remarks Mrs. Trollope in her recent work, "a young lady cannot touch wine of any kind, without very materially tarnishing the delicacy of her high breeding thereby."

"It has been remarked," says Sir John Sinclair, "that vice is more ingenious than virtue, and has numerous stratagems, by which she attacks, and too often vanquishes her simplicity. Among these, the custom of pledging during meals, and drinking toasts afterwards, are certainly the most dangerous; being customs which seem to promote social intercourse, and are accounted marks of friendship."† The inventor of toasts, says a well known writer, may justly claim a niche by the side of any hero who ever deluged the world with slaughter; and if the pestilence had been a human invention, he might certainly be stationed by the side of its great founder.‡

The practice of toasting, in the present day, is almost universal in its extent. Professing Christians, and even Christian ministers, countenance this most absurd and injurious practice at social and public entertainments. A great number of toasts or healths, prepared for the occasion, are successively proposed by the president, accompanied, as is not unfrequently the case, with strong requests to drink them *in full bumpers*!

VIII. Another lamentable inducement to intemperance may be found in the rewards which have been held out, at various periods of the world, for excessive drinking. Among the ancients excessive drinking was looked upon as honourable; and prizes were frequently awarded to the most copious drinkers. At the funeral of Calanus, the Indian philosopher, Alexander the Great offered prizes as stimulants to extra bibulous exertion. The first prize offered by this monarch, was a talent. Proportionate sums were also held out for the second and third prizes. Promachus, who obtained the first prize, drank four congii of wine.

The honour attached to this species of debauchery among the ancients was such, that several of their celebrated philosophers thought it no disgrace to engage in the

* Dunlop's *Philosophy of Drinking Usages*, p. 250. 1859.

† Sir John Sinclair's *Code of Health and Longevity*, vol. i. p. 258.

‡ Pinkerton's *Recollections of Paris*, vol. ii. p. 349.

contest, and even to carry off the prize. Timeus asserts that on one of these occasions Zenocrates, the philosopher, came off conqueror. Dionysius, the Sicilian, offered a crown of gold at a feast which he gave, to the person who should drink the most. Zenocrates became the victor.

Anacharsis, the celebrated Scythian philosopher, obtained a like victory at a feast given by Periander, the king of Corinth. Anacharsis was reproached for demanding the prize for being first drunk. He defended himself by appealing to the practice of the gods, as represented by the poets, and by asserting that such was the aim which all had in drinking. In like manner the racers pressed forward to win the prize.

At the Anthesteria (festivals held in honour of Bacchus) the greatest drinker was rewarded with a crown of gold and a cask of wine.

Many other examples might be adduced in proof of the estimation in which some of the ancients held drinking. The person, who, with the least injury, could bear the greatest quantity of intoxicating drink, was looked upon with a degree of admiration and respect; and in popular governments it not unfrequently conferred on such individuals great political advantages. Cyrus, brother to Artaxerxes, king of Persia, urged his superior Bacchanalian powers among other qualifications, as a reason for his eligibility to the throne, in the place of his brother. In a letter which he wrote to Lacedæmon, soliciting military aid, he stated that he could drink a larger quantity of wine than his brother, without being intoxicated or having his passions roused to an unpleasant or ungovernable extent. Artaxerxes in this respect had less command over his feelings than his more fortunate brother. Darius, the celebrated king of Persia, had a similar propensity. Athenæus relates that he desired no greater praise than that it should be engraved on his tomb, that he could indulge largely in wine without inebriation.*

ΗΔΥΝΑΜΗΝ ΚΑΙ ΟΙΝΟΝ ΠΙΝΕΙΝ ΠΟΛΥΝ
ΚΑΙ ΤΟΥΤΟΝ ΦΕΡΕΙΝ ΚΑΛΩΣ.

I was able to drink much wine and bear it well.

Socrates, it is said, possessed this power of *nervous resistance* in an eminent degree. Whether he indulged in the free use of wine, or lived in an abstemious manner, this celebrated philosopher displayed no perceptible alteration in his manners. Scaliger remarks of a German, that he is not less wise when drunk than when sober. *Non minus sapit Germanus ebrius quam sobrius.*† Montaigne makes a similar remark.‡ Cicero, however, correctly observes, that we must never expect prudence from those who are always in a state of inebriation. *Nec enim*

*ab homine nunquam sobrio postulanda prudentia.**

Pliny relates, that Tiberius Claudius, not only was a hard drinker himself, but so much countenanced excessive intemperance in others, as to "Knight" Novellius Torquatus, by the title of *Tricongius*, or *the three-gallon knight*, because he drank three gallons of wine at a draught.†

The Roman gallon is equal to seven pints, English measure. Potter remarks, that among the Greeks, when any person drank off a large cup ἀμυστή, that is, ἀπνευστή, ἀνευ τοῦ ἀναπαύεσθαι, without drawing his breath, the company used to applaud him in this form, Ζήσεις, long may you live.‡

Pliny also relates several other remarkable examples. Caius Piso, he informs us would continue drinking for two days and nights without intermission, or even leaving the table. By this means he ingratiated himself with the Emperor. Tergilla, a professed hard drinker, made a boast that he commonly drank two gallons at a draught. It is said that the gigantic Emperor Maximian, would drink six gallons of wine at a carousal.||

In reference to these astounding narrations, we must not forget that the wines thus drunk were not similar to those in use in the present day. Many of them, on the contrary, were unintoxicating and harmless in their effects, when taken in moderate quantities. It was a point of emulation to *drink large quantities of wine*, and to effect this object, methods were invented to destroy its strength. Pliny testifies this fact. *Ut plus capiamus sacco franguntur.*§ *That we may be able to drink the more, wines are weakened by the filter.* This subject, however, will be entered into at length in a subsequent part of our investigation.

This lax state of morals will occasion less surprise, when we recollect that some of the most eminent philosophers among the ancients, even recommended occasional drunkenness, as beneficial to both mind and body. Seneca, the great moralist, may be ranked among that number. Dioscorides is said to have affirmed, that drunkenness was not always hurtful, but that very often it was necessary for the conservation of health. Burton, in his quaint style, gives the following additional examples. "*No better physick,*" (saith Rhasis an Arabian philosopher) "*for a melancholy man: and he that keeps company and carouse, needs no other medicines; 'tis enough.*" His countryman, Avicenna,¶ proceeds farther yet, and will have "him that is troubled in mind, or melancholy, not to drink only, but now and then to be drunk: excellent good physick it is for this

* Cicero Orat. 2, ad Philip.

† Pliny, b. xiv. c. 22.

‡ Grec. Antiq. vol. ii. p. 395.

|| Pliny, b. xiv. c. 22.

§ Plin. Nat. Hist., lib. xiv. cap. 22.

¶ 31 doct. 2. cap. 8.

* Athenæus, lib. x.

† Scaligeriana, p. 169.

‡ Essais, lib. ii. ch. 2.

and many other diseases. Magninus* will have them to be so once a month at least, and gives his reasons for it, because it scours the body of all manner of superfluities and keeps it clean." "But," remarks this well-known writer, "these are epicureal tenets, tending to looseness of life, luxury, and atheism; maintained alone by some heathens, dissolute Arabians, and profane Christians."†

Several writers of more modern date, have singularly enough, recommended the same practice. Verulam may be included among the number. Celsus was of opinion, that occasional excess in eating and drinking, was beneficial to health. "*Modo plus justo, modo non amplius assumere.*" Melehior Sebizius, very correctly affirms, that by this advice, Celsus gives full scope to intemperance, and sets himself up as the patron of drunkards and gluttons.‡

The honourable notions which in all ages have been attached to excessive drinking, have greatly contributed to the spread of this vice. Burton, tritely, but powerfully adverts to this injurious practice, and gives some remarkable illustrations of the extent to which it was carried in his time.

Nash, a town wit, and writer of the reign of Elizabeth, gives us some curious particulars of the drinking habits of those times. "Superfluity in drink," he remarks, "is a sin, that ever since we have mixed ourselves with the low countries is counted honourable, but before we knew their lingering wars, was held in that highest degree of hatred that might be. Then if we had seen a man go wallowing in the streets, or lain sleeping under the board, we should have spet at him, and warned all our friends out of his company." "Now, he is nobody that cannot drink *super-nagulum*; *carouse* the hunter's *hoope*; quaff *upse freeze crosse*, with *healths*, *gloves*, *mumpes*, *frolickes*, and a thousand such domineering inventions." ||

Drinking *super-nagulum*, that is, *on the nail*, was as follows:—After a man, says Nash, "had turned up the bottom of the eup, he is to drop it on his nail, and make a pearl with what is left, which if it shed, and cannot make it stand on, by reason there is too much, he must drink again for his penance: Bishop Hall, in his satire, "*Mundus alter et idem.*" "A discovery of a New World," alludes to this custom.

D'Israeli, in his "Curiosities of Literature," gives us a quotation from a manuscript letter of the times, containing an account of Columbo, the Spanish Ambassador, being at Oxford, and drinking healths to the Infanta. The writer adds, "I shall not tell you how our doctores pledged healths to the Infanta and the Archduchess; and if any left *too big a snuff*, Columbo would cry,

"*supernaculum! supernaculum!*"* Sir George Mackenzie, in his "Travels through Ieeland," gives us an example of a similar custom in recent times.

To *carouse* the hunter's *hoope* is a practice of the same description. *Rouse* and *carouse* are terms derived from the Danes.† "A *rouse*," Mr. Gifford tells us in his *Massinger*, was "a large glass, in which a health was given, the drinking of which by the rest of the company formed a *carouse*." "Barnaby Rieh," states the same writer, "notices the *carouse* as an invention for which the first founder merited hanging. 'There could be no *rouse* or *carouse* unless the glasses were emptied.' " D'Israeli remarks that although we have lost the terms, we have not lost the practice, as the common custom on festive occasions testifies—"Gentlemen, *charge your glasses.*" To *carouse* the hunter's *hoope*, has reference to the custom of marking drinking vessels with *hoops*, with the view to measure every man his draught. Shakspeare's well-known character, Jack Cade, among other reformatations which he promises to accomplish, says that "there shall be in England seven halfpenny loaves sold for a penny, *the three-hooped pot shall have ten hoops*, and I will make it felony to drink small beer." This practice, like the *peg-tankard*, an invention, as we have before said, of King Edgar's time, was made an occasion of excess, rather than a limit of sobriety. Nash informs us, that "King Edgar, because his subjects should not offend in swilling and bibbing as they did, caused certain *iron cups* to be chained to every fountain and well side, and at every vintner's door, *with iron pins in them*, to stint every man how much he should drink, and he who went *beyond one of those pins* forfeited a penny for every draught." Pegge, in his *Anonymiana*, tells us that these peg-tankards had within them eight pins, one above another from top to bottom. The tankards held two quarts, so that there was a gill of ale between each pin. Each person was to drink alike—the first person emptying the tankard to the first pin, the second to the next pin, and so on. If a person in company either drank short of the pin or beyond it, he was obliged to drink again, by which method this singular plan was often perverted to drunken purposes. The practice was in vogue A.D. 1102, as we find from one of Archbishop Anselm's Canons, by which priests are enjoined not to go to drinking bouts, *nor to drink to pegs. Ut Presbyteri non eant ad potationes, nec ad PINNAS bibant.*‡

Most of our old English drinking phrases

* Reg. San. Part iii. c. 31.

† Anatomy of Melancholy, pp. 455, 456.

‡ De Aliment. Facultat. lib. v. probl. 7.

|| Nash's Pierce Pennilesse, 1595, sig. F 2.

* Curiosities of Literature, p. 279. Ed. 1838.

† Blount, in his *Glossographia*, informs us, that *carouse* is a corruption of two old German words, *gar*, which signifies *all*, and *ausz*, *out*. To drink, *garaur*, therefore, or to *carouse*, signifies to drink *all out*.

‡ Wilkins, vol. i. p. 385.

were derived from the Dutch, Danish, or German. *Half seas over*, a term in familiar use in our own day, for example, is derived from the Dutch. Mr. Gifford says, that it was a name given to a narcotic beer, introduced into England from the low countries. *Op-see* means literally *over-sea*, and *freezen* in German, signifies to *swallow greedily*: hence in Jonson, "*upsee Dutch*," and in Fletcher, "*upsee-freeze*," (the phrase mentioned as above by Nash) which latter term, Dr. Nott in his edition of Decker's Gull's Hornbook, explains as "a tipsy draught, or swallowing liquor till drunk." The true meaning, remarks D'Israeli was, "to drink swinishly, like a Dutchman."*

Burton, in his "Anatomy of Melancholy," thus refers to the bibulous propensities of the Dutch, as well as to toppers of his own times. "Our Dutchmen," says he, "invite all comers with a pail and a dish; *velut infundibula, integras obbas exhaustiunt, et in monstrosis poculis ipsi monstrosi monstrosius epotant, making barrels of their bellies.*—How they love a man that will be drunk, crown him and honour him for it, hate him that will not pledge them, stab him, kill him; a most intolerable offence, and not to be forgiven. *He is a mortal enemy that will not drink with him*, as Munster relates of the Saxons. So in Poland, he is the best servitor, and the honestest fellow (saith Alexander Gaguinus) *that drinketh most healths to the honour of his master.*" Burton then quaintly remarks, that "a brewer's horse will bear much more than any sturdy drinker," and soon afterwards adds that according to the notions of his times, "as much valour is to be found in feasting, as in fighting; and some of our city captains and carpet knights will make this good and prove it. Thus they wilfully pervert the good temperature of their bodies, stifle their wits, strangle nature, and degenerate into beasts." And again, speaking of drunkenness, he says "'tis now the fashion of our times, an honour—'tis now come to that pass, that he is no gentleman, a very milk-sop, a clown, of no bringing up, that will not drink, fit for no company: he is your only gallant that playes it off finest, no disparagement now to stagger in the streets, reel, rave, &c., but much to his fame and renown."†

After the restoration, loyalty and drunkenness became close allies. Burnett tells us that "drinking the king's health, was set up by too many as a distinguishing mark of loyalty, and drew many into great excess." This practice, we are told, occasioned much inconvenience to the pious and celebrated Sir Matthew Hale, who, when a young man, made a vow that he would not drink a health. This event took place in consequence of the excessive indulgence of one of his com-

panions, who had nearly lost his life as the penalty of his folly.

The Rev. Roger Turner thus concludes one of his sermons, at the restoration of King Charles II. "Do not drown your reason, to prove your loyalty,—pray for the King's health, but drink only for your own. Go now and ring your bells; but beware in the mean time, that you hold not fast Solomon's cords of sin, or the prophets cart-ropes of iniquity, and thereby pull down judgement upon your heads. You may kindle bonfires in the streets, but beware that you kindle not the fire of God's displeasure against you by your sins. In a word, for God's sake, for your King's sake, for your own Soul's sake, be *good*, that you may be *loyal*."

Examples of excessive drinking are not alone to be found in the pages of ancient history. Modern times present singular and almost incredible instances of this description.

Mr. Pinkerton states, that in Switzerland it was a rule of the French court not to name any ambassador, whose head, in the common way of speaking, but in fact whose stomach, was not strong enough to rival the senators of Berne in this department. One French ambassador, further states the same writer, gained great glory by filling his boot with wine, and drinking it off at one draught.* The modern Poles, it appears, in their gallantry, do not hesitate to alarm modest beauty, by taking off a lady's shoe and passing it round the table as a bumper full of wine to her health.†

Mr. Bowdich informs us, that during his visit to Ashantee, in 1817, one of the lords of the council expressed his surprise, that an English gentleman could only drink half a bumper, and observed, that he could drink three pots (that is about fifteen gallons) before he retired to rest!‡

Another traveller states, that among the Tartars at feasts of rejoicing, such as marriage ceremonies, it is not uncommon to see from two to four gallons of *koumiss*, or fermented mares' milk swallowed at three draughts.||

Mr. Marshall informs us, from data which he cannot doubt, that the soldiers in India sometimes drank from fifteen to twenty drams of arrack in one day. I have known, says the same writer, a man drink twenty-two drams (rather more than half a gallon) of arrack during the day he was upon guard, without his being considered too drunk for duty. The late sergeant-major of a certain regiment, had the character of occasionally drinking a gallon of spirits in one day, without being thereby rendered unfit for his vocation.§

Mr. Vanhorn, a Hamburgh merchant,

* Pink. Recoll. of Paris, vol. ii. p. 338. † Ibid.

‡ Bowditch's Ashantee, p. 386.

|| Billing's Travels, abridged by Sauer, 4to. p. 128.

§ Observations on the Abuse of Spirituous Liquors, by the European Troops in Indian.

* Curiosities of Literature, p. 278.

† Anatomy of Melancholy, 1621, p. 148.

was remarkable for his bibulous propensities. This drinking phenomenon, for three-and-twenty years, (two days only excepted, when called off to attend family funerals) drank four bottles of red port per day, and began a fifth. In the space of three-and-twenty years, it was computed that he drank, in all, thirty-five thousand six hundred and eighty-eight bottles, or fifty-nine pipes of red port.* It is incredible, remarks Sir John Sinclair, after relating this circumstance, what pleasure any individual can feel, in such abundant potations, in the course of which, he resembles more a cellar than a man, for there are many cellars that never contained what this man's stomach must have done, namely, fifty-nine pipes of port wine.†

Another example of monstrous drinking is found in a "Skye Farmer," of the name of Martin Power, who either now is in existence, says an individual well acquainted with his habits, or was so at no distant period. In the year 1836, he was seventy-two years of age. On an average he has, for the last fifty years, drank thirty glasses of whiskey per diem; on one occasion, he drank twenty-three pints of cider, in less than an hour—on another, he and four others, between four o'clock in the evening and day-break the following morning in a house where they were hired to make cider, consumed sixty-three gallons of that beverage, together with two quarts of spirits, of which it appears likely, Power had not the least share. On another day, this far-famed Bacchanalian, drank by himself four quarts of raw whiskey; and at one time, he confessed before the mayor of the town in which he resided, to having taken forty glasses, an excess of ten beyond his usual quantity. At a calculation of thirty-glasses a-day for fifty years, (which is considerably below the average quantity,) the total will amount to no less a quantity than one hundred and thirty-seven hogsheads and twenty-three gallons. This quantity is said to be as much as would float a man-of-war. The average cost of this liquor at the lowest calculation, would be 8s., and for many years of the above period, 16s.:—making an expenditure on this 'leprous distilment,' of £3421 12s., a sum sufficient to place an individual in independent circumstances. These facts are vouched for by the gentleman in whose service Martin Power had for many years been situated.‡

Dr. Trotter states, that in his time, some coal-heavers and porters in London, would consume four gallons of ale or porter in twenty-four hours. Dr. Macnish tells us that many of the coal-heavers on the Thames think nothing of drinking daily two gallons of porter, especially in the summer season, when they labour under profuse perspiration. A friend of Dr. Macnish,

knew an instance of one of them having consumed eighteen pints in one day, and he states that there are many such instances.* Dr. Trotter knew a marine, in a king's ship, who usually drank four gallons of beer in the day, but he soon grew bloated and stupid, and died of apoplexy. The same writer, adds the following additional cases. An officer of the hospital-ship of the fleet, besides his ordinary allowance of wine at the mess-table, usually drank a bottle and a half of gin in twenty-four hours. His face, at times, was equal to Bardolph's; with blood-shot eyes, foetid breath, &c. He died of apoplexy and diseased liver. A midshipman of Dr. Trotter's acquaintance, only sixteen years old, drank in the West Indies, three gallons of punch daily. He died, as might be expected, at an early age, and a professed drunkard.†

Mr. Wadd, in his Comments on Corpulency, states that it is on record that a Welsh squire, William Lewis, who died in 1793, drank *eight gallons* of ale *per diem*; a diurnal potation equalled, we may suppose, by few either in modern or ancient times.

Volumes might be filled with similar disgusting examples, a disgrace to professedly civilized, not to say Christian, countries; and fitting rather the annals of savage nations, than those of a people distinguished for religion, humanity, and refinement.

Æschines on one occasion commended Philip of Macedon as a man who would indulge copiously in his potations. Demosthenes justly replied, that it was a good property in a sponge, but not in a human being. "I never heard," observed Lord Burleigh to his son, "praise ascribed to a drunkard, but for bearing of his drink, which is a commendation for a brewer's horse or a drayman rather than a gentleman." The conduct of Galerius Maximinus, in his sober moments, was worthy of commendation. Aurelius Victor describes this prince as sweet in temper, and a patron of literature. He had, however, an unfortunate predilection for wine. In one of his fits of drunkenness he gave orders of which he had cause to repent when returning sobriety enabled him to view matters with dispassionateness and care. Henceforth this prince solemnly forbade any of his officers or dependents to carry into effect such commands as he might be induced to issue when heated with wine.

An intelligent traveller relates an interesting anecdote of the reigning Bey of Tunis, Hamoola Pacha, who succeeded his father, Ali Bey, 1782. This prince, in early life, was addicted to the free use of wine. His slaves were the usual associates of his revelrous debauches. About ten years after his accession, a fortunate event put an end to this inglorious career. In a fit of intemperance he gave orders that some people

* Gentleman's Magazine, vol. lxxi. p. 591.

† Code of Health and Longevity, vol. i. p. 279.

‡ Clonmel Advertiser

* Anatomy of Drunkenness, p. 69.

† Trotter's Essay on Drunkenness, p. 181, 4th. Edit

belonging to the Dey of Algiers, who were rather too boisterous in their mirth, should be strangled. The minister was more prudent than his lord, and only put the poor fellows in prison. The Dey, on the morrow, sensible of his folly, not only commended this act of disobedience, but resolved henceforth never on any occasion to taste wine or strong drink. From that time his subjects enjoyed a degree of independence and protection which had never before been their lot.*

Habits of inebriety have, in all ages, been formed from erroneous notions of hospitality. It is a common practice in some nations for the host, at an entertainment, to do his utmost to make his guests drunken. This was the case among the Persians, as testified by Sir John Chardin. It has been a practice, more or less connected with habits of gross drinking. Hence arise strong inducements to excess from motives of politeness and good breeding. The folly of the latter concessions to vice have been pointedly commented upon by writers of distinguished celebrity. Creon, in the Tragedy, is made to say, "It is better for me to grieve thee, O stranger, than by complying, to be tormented to-morrow." Bishop Taylor remarks, "*He that tempts me to drink beyond my measure civilly invites me to a fever.*" Plutarch strongly deprecates the practice of prompting to excess, and the folly of giving way to it from motives of politeness. "He who to avoid being censured as an uncivil person, throws himself into a *pleurisie* or a *phrensie*, is certainly no well-bred man, nor has sense or understanding enough to converse with men, unless in a tavern or a cooks-shop; whereas an excuse ingeniously and dexterously made, is no less acceptable than compliance."† Jeremy Collier, in his dialogue between Encratus and Cœnophilus, writes with great force and good sense on the same subject.

This false notion of hospitality has been attended with lamentable effects as regards the clergy of Iceland. An author, who visited this island, states that nothing but brandy is ever offered to them on their travels when entering the house. "From this arises the vice of drunkenness, which is said to be so frequent amongst them, that in recommending one to be bishop or governor, sobriety is thought the highest character. Many are habitually intoxicated, even when performing public worship, and few scruple to exceed the bounds of temperance when visiting the towns, or at festivities."‡

The rules of drinking, in modern times, have been equally arbitrary with those of the Greeks and Romans, and bear much similarity to the customs of those celebrated nations. "Formerly," says Sir John Sin-

clair, not only stratagems were used, but even compulsion. It was not uncommon to have a great goblet, called a *constable*, placed upon the table, *in terrorem*, which he who flinched from his glass was *obliged* to drink, however unequal to the task. So that sooner or later, intoxication was unavoidable."* The same writer adds, that the *constable* was formerly usual in other countries besides Ireland, though it is said to have originated in that hospitable island. There was formerly a most detestable custom at Edinburgh, on St. Cecilia's day, of *saving* ladies, as it was called, or striving who would drink the greatest quantity of wine to the health of different beauties, and she, to whose health the greatest quantity was drank, was "*the belle*" of the season.†

Mr. and Mrs. S. C. Hall, in their interesting and valuable work on Ireland, recently published, detail similar customs and devices as having had their existence in that once called, but now happily regenerated, "land of whiskey." "We are ourselves old enough," say they, "to recollect, when a host would have been scouted as mean and inhospitable, who had suffered one of his guests to leave his table sober. Ingenious devices were invented for compelling intoxication: glasses and bottles so formed that they could not stand, and must be emptied before they could be laid upon the table—the object being to pass the wine rapidly round—were in frequent use. We dined once with a large party where the tea-kettle, from which the tumblers were supplied, had been filled with heated whiskey; the partakers of the "cheer" being "too far gone" to perceive they were strengthening their punch instead of making it weaker. If a guest were able to mount his horse without assistance in the 'good old times,' he was presented with a 'deoch and durrass' glass, which he was forced, seldom against his will, to 'drink at the door.' This glass usually held a quart; it was terminated by a globe, which, of itself, contained a 'drop' sufficient to complete the business of the night. The degradation was looked upon as a distinction: and an Irishman drunk, was an Irishman 'all in his glory;' and a 'strong head' was considered an enviable possession. Many years ago we were acquainted with a gentleman at Ross-Carbery, whose daily 'stint' was five-and-twenty tumblers of whiskey-punch of the ordinary strength; and we knew another, whose frequent boast it was, that in a long life he had drunk enough to float a seventy-four gun ship."

IX. *The facilities afforded for the sale of intoxicating liquors, and the numerous temptations which are held out as a means*

* Conder's Modern Traveller—Africa, vol. i. p. 218.

† Plutarch's Morals, Old Translation.

‡ Iceland, Greenland, and the Faroe Islands. 1840.

* Watkinson's Philosophical Survey of Ireland, pp. 40, 41.

† Sir John Sinclair's Code of Health and Longevity, vol. i. p. 289.

of increasing their consumption, form other strong inducements to the formation of intemperate habits. Taverns or houses for the sale of intoxicating liquors, are of ancient date. Herodotus states, that the Lydians were the first who commenced the practice of opening taverns or houses of refreshment. The ruling authorities of various countries, in the first instance, allowed them to be opened, with the intent of providing more especially places of rest and refreshment for travellers. In course of time these establishments multiplied. In some nations the sale of liquors was encouraged as a financial speculation, or source of emolument to the government: in others, their increased consumption was viewed with apathy, or indifference, as not involving any consequences worthy of legislative notice or interference. In the meanwhile the appetite of the people for strong drink increased, until at last, legal enactments were found inadequate entirely to remove, or even effectually to check, the progress of intemperance. Such has been the experience of most nations where the traffic of intoxicating liquors has been established and encouraged.

In the reign of Edward VI., taverns were denounced by Act of Parliament, as the resort of evil disposed persons, and the cause of "much evil rule." From the preamble of the Act it appears, that at that time they were "newly sett uppe in very great nambre, in back lanes, corners, and suspicious places within the eytie of London, and in divers other towns and villages within this realme." A statute passed 1552, recites, that, "Intolerable hurts and troubles to the Commonwealth daily grew and increased, through such abuses and disorders as were had and used common ale-houses, and other houses, called tippling-houses." The English Parliament, at an early period, specified the purpose of houses for the sale of ale and beer. An Act passed in the seventeenth century, recites that, "The ancient, true, and principal use of ale-houses was, for the lodging of wayfaring people, and for the supply of the wants of such as were not able, by greater quantities, to make their provisions of victuals, and not for entertainment and harbouring of lewd and idle people, to spend their money and their time in a lewd and drunken manner."* In the succeeding reign (Charles I.) the Lord Keeper Coventry, declared his opinion of them in the following strong terms:—"I account ale-houses and tippling-houses the greatest pests in the kingdom. I give it you in charge to take a course that none be permitted unless they be licensed; and for the licensed ale-houses, let them be but a few, and in fit places; if they be in private corners and ill places, they become the den

of thieves—they are the public stages of drunkenness and disorder." These complaints were reiterated during the Commonwealth. At the London Sessions, 1654, the unnecessary number of ale-houses in the city was alluded to in strong terms: "Whereby lewd and idle people were harboured, felonies were plotted and contrived, and disorders of the public peace were promoted."

In 1725, a Report from a committee of Middlesex magistrates, stated, that at that period there were in the metropolis, *exclusive* of the City of London and Southwark, 6187 houses and shops, "wherein geneva, or other strong waters, were sold by retail." The committee then proceed to state, that although this number was exceeding great, and far beyond all proportion to the wants of the inhabitants (being in some parishes every tenth house; in others, every seventh; and in one of the largest, every fifth house;) yet they had great reason to believe that the report was very short of the true number." The population, at this period, did not exceed 700,000. Add to the number reported (6187) 1000, for the City of London and Southwark, and 500 for illegal places, and the total amount of establishments for the sale of intoxicating liquors in the metropolis, in the year 1725 amounted to 7687.*

In about twenty-five years afterwards, viz. 1750, the following is an authentic account of the proportion of houses of this description compared with the number of other dwellings:—

	Public Houses	Private Houses.
London	1	to 15
Westminster . .	1	„ 8
Belborn District .	1	„ 54
St. Giles . above	1	„ 4

How far this corresponded with the condition of provincial towns is not recorded. The proportion, however, would not fall very considerably short of the metropolitan calculation. In the present day, it appears, that there are not more public-houses to a population of nearly 2,000,000, than there were in 1725, to a population certainly not amounting to 700,000. This may, in part, be attributed to a decreased consumption of ardent spirits, which at that period, was frightful in the extreme; and partly to a monopoly in the modern fashionable establishments called "Gin Palaces."

In the year 1829, the erroneous notions of British legislators caused a measure to be passed for the more extensive sale of beer, which has been productive of pernicious consequences. The fact is now fully established, that the use of weaker alcoholic liquors invariably tends to create a taste for those of a stronger description. In no instance has this fact been more powerfully shown, than in the increased drunkenness

* 2 Jac. i. c. 9

* Penny Magazine, 1857, p. 131.

exhibited in most parts of the kingdom, as the consequence of this ill-judged and fatal act of legislation.*

The inducements held out by publicans contribute very much to the progress of intemperance. The vending of intoxicating liquors has never been held as respectable; and it has, in general, been conducted by persons of low, and frequently immoral, character, who have resorted to most degrading means in order to increase this profitable source of emolument. Complaints, of this description, were made, even at so early a period as the reign of Edward I. (A.D. 1285). In the statutes for the regulation of the city of London at that time, it is stated, that "divers persons do resort unto the city," some who had been banished or who had fled from their own country, also foreigners and others, many of them suspicious characters; and "of these, some do become brokers, hostlers, and inn-keepers, within the city, as freely as though they were good and lawful men of the franchise of the city; and some do nothing but run up and down through the streets, more by night than by day, and are well attired in clothing and array, and have their food of delicate meats and costly: neither do they use any craft or merchandise; nor have they any lands or tenements whereof to live, nor any friend to find them; and through such persons many perils do often happen in the city." In addition to this, it was complained, that "offenders, going about by night, do commonly resort and have their meetings and evil talk, in taverns more than elsewhere, and there do seek for shelter, lying in wait and watching their time to do mischief." To do away with this grievance, taverns were not allowed to be opened for the sale of wine and ale after the tolling of the curfew.

About the end of the fourteenth century, Lydgate, a priest and rhymers, in a poem called the "London Lyckpenny,"† describes the method then used by the "taverner" to attract his customers. The youth, the hero of the poem, is descanting on his adventures as he passed through the streets of London.

"The taverner took me by the sleeve,
'Sir,' saith he, 'will you our wine assay?'
I answered 'that can not much me grieve,
A penny can do no more than it may;'
I drank a pint, and for it did pay."

At the present period, various means are used to produce the same end. In our villages, in particular, races and games of diversified character are the usual inducements to drink, at stated periods of the year. These are so common in the present day as to require no further illustration.

In large cities and towns every means of attraction is resorted to for the same pur-

pose. Within a recent period a species of building has arisen, which has been appropriately termed the "Gin-palace." Many of these engines of destruction are gorgeously decorated at an expense, which would be deemed incredible if not certified on undoubted authority. Into these seductive abodes, thousands of deluded and wretched individuals enter daily, victims of a vice which must ultimately lead them to poverty and premature death.

It has of late become a common practice in large towns to exhibit museums, pictures, and other attractions, in connexion with houses for the sale of strong drink. *Music* forms a fashionable means of attraction. In the town of Manchester, this is particularly the case. In 1751, at a time when various enactments were framed to put a stop to the fearful drunkenness which prevailed at that period, an act was passed prohibiting every kind of music in public-houses. This act is still in force; yet most public-houses, and many beer-shops, have organs and other instruments of sound. On Sabbath evenings these habitations of revelry are thronged with young persons of both sexes indiscriminately, and scenes, not unlike the Bacchanalia of ancient Greece, present themselves to shock the eye of soberness and modesty.

The practice of holding *clubs*, combinations of workmen, and even parish and other meetings of like character at public-houses, forms another very fruitful source of intemperance. In country places, in particular, it is not uncommon to witness gross scenes of intoxication, consequent on the feasting which too often follows the transaction of parochial affairs. On the termination of Friendly Society meetings, intemperance and broils are also commonly witnessed. Indeed it is well known that a large proportion of the hard-earned savings of the members of these charitable institutions is consumed in the purchase of inebriating liquor. The following is an example in point. It relates to a sick club not far from the town of Preston, Lancashire:—

Cash collected from members during				
two years	-	-	-	£63 2 11½
Music				£4 18 0
Colours and flying				9 10 10
Splendid bunches				4 13 5½
Staves of authority				1 4 6
Sexton and other unnecessary				
expenses	-	-	-	4 10 4
Dinners!	-	-	-	13 16 6
Ale!	-	-	-	14 4 9
				52 18 4½
Books				0 13 10
Box				1 8 0
Sick received				8 2 9
				10 4 7
				£63 2 11½

Share of the money de-		
voted to the sick	-	£8 2 9
The publican's share!	-	28 1 3

* Parliamentary Report, 1834; also Parliamentary Discussion, 1839.

† Strutt's "View of Manners."

Thus the publican has a direct interest in the formation and continuance of these well intentioned societies.

To detail the various meetings and societies of this kind at which intemperance is fostered and produced, would require a volume of no small extent. The customs of drinking, have, in all ages of the world, been closely associated with the usages of society. To be successful in their efforts, therefore, all institutions for the promotion of temperance, must make strenuous efforts to do away with these strongholds of sin. Public attention is already drawn to this interesting and important subject.

SECTION II.

PHYSICAL CAUSES OF INTEMPERANCE.

"Have a care of an unfortunate custom; it may be, it has a tolerable complexion; it may be, the failing is somewhat imperceptible in the single instance. Don't trust to that; 'twill rise in the sum. To go always a little out of the way, makes a strange mistake upon the progress. A grain will grow to a burthen by constant addition. To be always dipping into an estate, is the way to turn beggar: and tho' the degrees may be gentle, the misfortune will come heavy at last.—A drop that's perpetually pelting, will make a stone give way, and grow hollow. *Bacchus* will be always an idol: have a care of coming near the worship. Don't make your body a heathen temple, nor your health a sacrifice."

COLLIER.

- I. Delusive notions in regard to *strong* liquors.—
- II. The moderate use of intoxicating liquors, the primary physical cause of intemperance.—
- III. Improper diet and physical exhaustion a cause of intemperance.—
- IV. The use of stimulants in various forms, a cause of the formation of intemperate habits.—
1. The use of condiments or provocatives.—
2. The use of tobacco in smoking.—
3. The use of various preparations of opium.—
4. The use of spirituous, patent, or quack medicines.—
- V. The present system of the medical profession, a productive source of intemperance.

I. ANOTHER principal cause of intemperance may be found in the erroneous opinions which prevail concerning the enlivening, strengthening, and peculiarly invigorating properties of intoxicating liquors. Giving credence to these delusive notions, men in all ranks and conditions of life resort to them with eagerness and confidence. The plodding traveller considers alcoholic stimulus as the indispensable companion of his journeys; the labouring man views it as his cheering friend during unceasing toil and exertion; and the student—he of the midnight oil,—has recourse to its exhilarating influence, during moments of mental depression and physical debility.

This popular delusion has been countenanced and fostered by the fictitious and delusive names by which these liquors in general have been known. Alcohol, when first discovered, was supposed from its

potent effects, to be possessed with life-preserving qualities, and was in consequence called *Elixir vitæ*, or the Elixir of Life. Among the French, it is known by a similar name, *Eau de Vie*. "When the common people are depressed," remarks a popular writer, "they take a dram, because it is a spirit. They then conceive that they have got what they wanted, and must of course be merry. Had it not been for the unfortunate epithet of *strong* being applied to *beer*, and the term *spirit* being given to *brandy*, people would never have guessed that ale gave them strength, or brandy created spirits."*

Homer thus alludes to this popular fallacy:—

O, Hector! say what great occasion calls
My son from fight, when Greece surrounds our walls?
Com'st thou to supplicate th' Almighty power,
With lifted hands, from Ilion's lofty tower?
Stay, till I bring the cup which Bacchus crown'd,
In Jove's high name, to sprinkle on the ground,
And pay due vows to all the gods around.
Then with a plenteous draught refresh thy soul,
And draw new spirits from the generous bowl:
Spent as thou art with long laborious fight,
The brave defender of thy country's right.

The warrior, however, refuses to taste the proffered stimulant. The experience, even of those times, acknowledged the insufficiency of strong drink, either to support the spirits under anxious depression, or to enable the human frame the better to endure fatigue.

Far hence be Bacchus' gifts, (the chief rejoind)
Inflaming wine, pernicious to mankind,
Unnerves the limbs, and dulls the noble mind.
Let chiefs abstain, and spare the sacred juice
To sprinkle to the gods, its better use.†

Innumerable illustrations of the same delusion may be found in the writings of our English dramatists and poets. Shakspeare not unfrequently makes his characters speak the prevailing notions of the times. When Boniface is told "that his ale is confounded strong," he replies, "True; or how else should we be strong that drink it." Examples might easily be adduced where the words "good" and "strong" are identified with intoxicating liquors: two may suffice.

"Here is a pot of good double beer neighbour;
drink."
SHAKSPEARE.

"Strong, lusty, London beer."
FLETCHER.

Pernicious indeed, but deeply rooted, is that error which supposes, *that because intoxicating liquors are* (to use a popular expression) *strong, they necessarily possess strengthening properties*. Permanent vigour can alone be secured by due observance of the laws of nature, and not by violent, and consequently, unnatural, physical excitement.

"The strength," remarks Mr. E. Johnson, in a work which is worthy of universal perusal, and displays much vigorous intellect as well as philosophical correctness on the part of its author, "that is, the intoxi-

* Jackson on the Four Ages.

† Pope's Iliad, lib. vi. 320.

cating power of wine and ale depends upon the spirit they contain. A great deal of mischief has arisen from the misapplication of the term '*strength*' to the intoxicating power of '*strong drinks*.' Potations are said to be *strong*, and hence the silly notion that they possess the power of *strengthening* the body. People seem to suppose that by swallowing strong drinks they actually swallow *strength*, as though it were some tangible substance to be chewed, swallowed, and digested like a potatoe. We say onions '*smell strong*,' and we might as well expect to derive strength from *smelling* onions, as by drinking fluids of a *strong* flavour. We call them strong, because they affect us *strongly*. Whatever affects us *strongly* cannot be indifferent; and if it be not good, it must not only be simply injurious, but very much so."*

Recent investigation has tended very much to dissipate these erroneous notions. Men begin to reflect on the folly of being influenced and guided by mere words, on subjects which alone can be determined by the test of investigation and experience.

II. The *moderate use of intoxicating liquor forms, no doubt, the most powerful inducement to the formation of habits of intemperance*. The creation, as well as progress, of the drunkard's appetite is gradual, insidious, and almost imperceptible. The peculiar changes which alcoholic liquors effect on the animal economy, almost *physically impel* those who indulge in the use of strong drink, to seek relief from the original source of their disquietude—the poisonous cup. Each act of indulgence but strengthens the fetters which bind the unhappy victim.

One of the first stages of intemperance is witnessed in the anxious and uneasy feelings, which even MODERATE drinkers invariably experience, on occasions when they have been accidentally deprived of their accustomed stimulus. Sensations of this nature, present undoubted evidence of the existence and developement of the *inebriate* propensity. Indeed, the great danger of moderate drinking consists in the inability to ascertain at what precise period in the progress of the vice this unnatural sensation first commences.

It is aptly remarked by a drinker of half a century, that the first pint of beer is like the first spark falling on the tinder: and that we may keep on adding spark to spark, till our whole vitals are in a flame. This remark is correct in a physiological point of view. The human system is naturally endowed with those feelings and powers which are necessary to enable it to perform the animal functions by which its existence is continued; and these are regulated, both in respect of their strength and action, by

the power which imparts them. Counteract or subdue these natural impressions, by a superior and unnatural influence, and a new state of things is induced, which eventually predominates. Such is the change effected by the stimulating influence of inebriating compounds. The excitement which alcohol creates, is always succeeded by a corresponding depression of the animal functions, or in other words, a desire or physical craving for renewed stimulation. Hence, the formation of an artificial and insatiable appetite.

The difference between *moderate excitement* and *intoxication* is but a *degree*. The kind of action is the same. The results produced are of course in proportion to the amount or strength of the active agent. In the one instance the links of the chain are but few; in the other the chain is complete in all its proportions. The excitement produced by alcoholic liquors, however small in degree, is unnatural and morbid, and opposed in every respect to the agreeable excitement of healthy action. It arouses the self-preserving power of nature into vigorous operation. Hence, when alcohol in any proportion is taken into the system, it excites a series of repulsive actions—an intense desire (if we may so express ourselves) to eject a fluid so unnatural and noxious in its influence.

It is not sufficient to reply that persons indulge in large quantities of these liquors with comparative impunity, with no apparent injurious results, or at least *without manifest effects*. The same argument holds good in reference to any other poisonous drug. A limited portion of opium will produce a narcotic effect on the healthy system. Habitual use, however, enables individuals to take without any perceptible influence ten or twenty times the same amount. No one would presume from this circumstance that the moderate use of opium was harmless in its effects, or that individuals were thereby justified in defending the practice. In a moral and physical point of view, habits are formed by degrees, often imperceptibly, and unfortunately in too many instances, the dangerous consequences are discovered when the mischief has been irretrievably effected. If, remarks Paley, we are in so great a degree passive under our habits, where, it is asked, is the exercise of virtue, the guilt of vice, or any use of moral and religious knowledge? I answer, replies the same writer, in the *forming* and *contracting* of these habits. And hence, he further adds, results a rule of considerable importance, viz: *that many things are to be done and abstained from solely for the sake of habit*.*

The acquisition of good habits is, therefore, of immense importance. The moderate use of intoxicating liquors, both in a moral and physical point of view, is the high road

* Life, Health, and Disease, by E. Johnson, Esq., Surgeon.

* Paley's Moral Philosophy, book I, chap. 7.

to intemperance. The *habit* of intoxication is a confirmed taste or appetite for strong drink, acquired in the first instance by moderate indulgence. The *act* of intoxication is that expanded state or high degree of excitement of which *moderate drinking is the preparatory stage*. The creation of the drunkard's appetite is in strict accordance with the laws of the physical system. It is quite true in relation to the bodily powers as well as the moral, that habit is the second law of nature. The actions of the human frame are exactly adapted to its requirements. All interference or derangement of the same is certain to be attended with injurious consequences. If the natural and healthy actions of the system, we again repeat, are displaced or overcome by a series more potent in their character, a disorganized state, greater or less in degree in proportion to the strength or amount of the agency in operation, is produced, which on every repetition of the cause, increases in its force, until it results in the formation of a settled and ungovernable appetite.

The writings of the most eminent members of the medical profession strengthen these opinions. The following remarks of Dr. J. Baxter, of New York, are pointed and correct:—"The habit of moderate drinking has been the principal cause of the wide-spread scourge of intemperance. The laws of gravitation in impelling ponderous bodies towards the centre, are scarcely more certain than the moderate use of liquor in begetting the drunken appetite. There is no safety but in obeying the command, 'Look not on the wine when it sparkleth; for at the last it biteth like a serpent, and stingeth like an adder.' While I have known persons who have used ardent spirit during their whole life-time, and that to a great age, without exceeding moderation, and, perhaps, were never intoxicated, there have been others, who have been led into the habit, by commencing with the moderate use, which has involuntarily and imperceptibly increased and gained upon them, until it was too late to retreat. Ardent spirit, and even malt liquors, and wine, excite thirst, or rather a desire for more, as sugar and sweetmeats in a child; this is more perceptible in warm weather; hence, glass after glass is taken, which but inflames the more, till the taste is completely vitiated, and all the faculties are for the time suspended. He who habituates himself moderately to liquor becomes easily a tippler; giving himself up to his acquired taste, he is frequently overcome to intoxication, and ends with being a drunkard; the faculty of receiving impressions is lost, evil dispositions are acquired, and he becomes truly the brute."* Fifteen medical gentlemen of New York unite in one general testimony, that "*the moderate use of alcoholic drinks has a natural tendency to*

produce the drunken appetite." The same medical gentlemen also unite in evidence "that *those persons who use intoxicating liquor regularly, cannot reasonably expect to avoid the contraction of an unnatural thirst for stimulus.*"*

Evidence in support of this fact might be multiplied to an almost unlimited extent. *Universal experience indeed demonstrates that it is physically impossible for mankind habitually to use intoxicating liquors, without imminent danger of the formation of intemperate habits.* Additional corroborative testimony will be adduced from time to time, in various other sections of this work.

III. The habits of society as existing in the present day, are almost uniformly favourable to the development of the physical, as well as moral causes of intemperance. Of the former inducements to this degrading vice, *improper diet* constitutes one of the most common. The *quantity* of food commonly made use of, its *innutritious qualities*, and the *variety* of dishes so profusely employed in the present day, tend, very considerably, to injure the functions of the stomach, and to debilitate or frustrate its important operations. Feelings of a painful and distressing nature follow unnatural distension of the stomach with food; for the removal of which, recourse is too frequently had to spirituous stimulants. This practice, although apparently productive of *temporary* relief, is eventually injurious, and even fatal in its consequences. The unnatural action to which the stomach is subjected by repeated violence of this description, produces, at an early period, a languid and comparatively torpid state of its functions. This, unfortunately, is again sought to be removed by alcoholic excitement. Hence have arisen innumerable cases of intemperance, issuing, not unfrequently, in incurable disease.

The *physical exhaustion*, induced by vicissitudes of climate or weather, and unnatural exertion of the animal system in various ways, forms another very general inducement to intemperance. *Excessive labour* may, with propriety, be included in this class. The animal system is competent to a certain amount only of exertion, and, when over-worked, exhaustion is induced of a distressing nature. Intoxicating liquors, from the stimulating properties which they possess, are, but too frequently resorted to in such cases, as agreeable, and apparently effectual, remedies.

Languor and exhaustion, combined with feelings of irksome thirst, are produced by the excessive *heat* of summer. The system, in this state, and especially during laborious exercise, generally loses a large amount of perspirable matter; and the notion almost universally prevails, that stimulating liquors recruit the exhausted strength, and counteract the loss thus sustained.

* Testimonies of Physicians. New York 1830.

* Testimonies of Physicians. New York. 1830

The depression or exhaustion produced by excessive *cold*, forms another powerful inducement or pretext to intemperance. Artificial means of procuring animal excitement are resorted to by the unthinking portion of society. In this case, however, as in all others wherein *liquid fire* is the agent of renovation, *the remedy leads to evils incomparably worse than the disease*.

Another variety of physical exhaustion is produced by confinement in an *impure* or badly ventilated *atmosphere*. Those ill-ventilated workshops, where great numbers of operatives are continually employed, may be classed among situations of this description. Languid circulation of the blood, accompanied with imperfect operation of its functions, are the consequences of confinement in a stagnant and polluted atmosphere. The corporeal depression which necessarily ensues, is too often sought to be removed by the use of stimulating liquors.

Almost every branch of trade, particularly when carried on in crowded towns, has some unhealthy circumstance connected with it; for the removal of which, mankind are too willing to resort to such sources of relief, as necessarily induce, if they do not originate in, a love of sensual indulgence.

IV. *The use of minor stimulants in various forms, is another productive cause of intemperate habits.* In this description may be included a very large proportion of the substances employed either in the preparation of various articles of cookery, or as domestic and popular medicines. In addition to these may be enumerated other practices, which come strictly under the denomination of luxuries. Each of these will be noticed under its respective division.

1. *The use of Condiments or Provocatives, either in eating or drinking.*

This practice has been more or less in vogue from an early period. The Greeks and Romans, in their degenerate days, invented many ingenious methods to accomplish this purpose. Horace, in one of his satires, thus adverts to the provocatives to drinking used by the Romans:

"Stew'd shrimps and Afric cockles shall excite
A jaded drinker's languid appetite."

Or,

"Grapes and apples with the lees of wine,
White pepper, common salt, and herring-brine."*

The Romans, according to Pliny, took hemlock to excite them to drink heavily through fear of death. "That we may drink the more wine, we allay its fire by cooling it in snow; and many other expedients have been devised. Some take cicuta before they commence drinking, that death may compel them to drink; others use fine ground pumice-stones, and other things, of which I am ashamed to speak."† "Cicuta," further remarks Pliny, "is a

poison of odious celebrity, from its use in the public punishment of the Athenians; the seed and leaves have a refrigeratory power. Those who are killed by it, begin to be cold in the extremities; but wine, from its heating qualities, is a remedy, if used before the cold reaches the vital parts."* Theophrastus states, that great drunkards were accustomed to take the powder of pumice-stone previous to engaging in the work of inebriation.

The practice of using provocatives was termed in olden times *shoeing-horns*. Nash, in his "*Pierce Penniless*," among some of the "general rules and inventions for drinking," specifies "to have some *shoeing-horn* to pull on your wine, as a rasher on the coals or a red-herring." Bishop, in his "*Mundus alter et idem*," uses these words: "Then, sir, comes me up a service of shoeing-horns of all sorts; salt cakes, red-herrings, anchovies, and gammons of bacon, and abundance of such *pullers-on*."‡ Massinger gives us a remarkable list of these "provocatives;" one of which he denominates a *drawer-on*; a phrase identical with that under consideration.‡ Burton, in his *Anatomy of Melancholy*, says, that in his time, "*salsages, anchovies, tobacco, caveare, pickled oysters, herrings, fumadoes*," &c., were used to increase their appetite, and to enable them "*to carry their drink the better*." The same custom has been handed down to our own times. The condiments, or provocatives, employed at the present period, are too numerous to be separately detailed. Most of them are injurious when used in any considerable quantity, and even in moderate proportions, they more or less debilitate the natural functions of the stomach. Medical men differ much in opinion as to their utility. Pliny pointedly condemns the use of condiments, which he terms pernicious:—*Homini utilissimus est cibus simplex, conservatis saporum pestifera, et condimenta perniciosiora*. Dr. Robertson, in his recent popular treatise on *Diet and Regimen*, states, that their use should be only "moderate and occasional," and adds, that "languor and exhaustion are almost sure to follow even a single instance of their immoderate use; and taken habitually, they are certain to produce, indirectly, debility and weakened action of the several functions; particularly, and usually, in the first place, of those of the stomach."|| Dr. Trotter also reprobates the habitual use of these articles. "It is worthy of remark," says he, "that condiments of every kind, from custom, become very desirable, till at last no food is relished without them. But it is rather the palate than the stomach to which they are grateful." Again, "to mustard and pepper I have never accustomed myself, from infancy upwards;

* Natural History, lib. xxv.

† Description of Tenter-belly, lib. I. chap. 3.

‡ Massinger. The Guardian, act ii. s. 3.

|| A Popular Treatise on Diet and Regimen, by W. H. Robertson, M.D., p. 49.

* Francis's Hor. lib. ii. sat. 4.

† Natural History, lib. xiv.

and I remain a proof of the truth of my own doctrine, few persons being more exempt from dyspepsia."* To a stomach in a healthy state, these provocatives are not only never useful, but always productive of injurious consequences. As mere stimulants, they debilitate the digestive functions, and require continual increase in quantity, in order to keep up the artificial excitement which habit has, in some degree, rendered necessary. Hence, arises the practice of indulgence in intoxicating liquors. Few persons indulge freely in the use of condiments, who are not also partial to alcoholic stimulants. In this manner thousands of drunkards have been formed. The practice ought to be abandoned by all temperate persons, as in the highest degree dangerous, not only in regard to its effects in debilitating the digestive functions, but in the temptation which it offers to the formation of intemperate habits.

2. *The use of tobacco presents another popular, yet dangerous, inducement to intemperance.*

Tobacco belongs to the class of narcotic stimulants. As a *medicine*, it is occasionally employed by the profession. As a provocative to drinking, it has been condemned by the wisest of men. Sylvester, in allusion to this well known property of tobacco, playfully, but ingeniously, derives its name from Bacchus :—

“Which of their weapons hath the conquest got,
Over their wits; the pipe or else the pot?
For even the derivation of the name
Seems to allude to, and include the same:
Tobacco, as τῷ Βαχχῷ—one would say;
To cup-god Bæchus dedicated aye.”

Raphael Thorius attributes the discovery of this noxious herb to *Bacchus*, *Silenus*, and the *Satyrs*, the representatives of *drunkenness*, *gluttony* and *lust*. Dr. Adam Clarke says, “so inseparable an attendant is drinking on smoking, that, in some places, the same word expresses both: thus, *peend*, in the Bengalee language, signifies to drink and to smoke.”† “It is with pain of heart,” adds the same distinguished writer, “that I am obliged to say, I have known several, who, through their immoderate attachment to the pipe, have become mere sots. There are others who are walking unconcernedly in the same dangerous road. I tremble for them.” The late Governor Sullivan, of America, in speaking of the use of tobacco, remarks,—“The tobacco pipe excites a demand for an extraordinary quantity of some beverage to supply the waste of glandular secretion, in proportion to the expense of saliva: ardent spirits are the common substitutes; and the smoker is often reduced to a state of dram-drinking, and finishes his life as a sot.” Dr. Rush observes, that “smoking and chewing tobacco, by rendering water and

other simple liquors insipid to the taste, dispose very much to the stronger stimulus of ardent spirits; hence, the practice of smoking cigars has been followed by the use of brandy and water as a common drink.” Dr. Agnew also asserts “that the use of the pipe leads to the immoderate use of ardent spirits.” A writer in “the *Genius of Temperance*,” an American publication, states that his practice of smoking and chewing tobacco “produced a continual thirst for stimulating drinks; and this tormenting thirst (says he) led me into the habit of drinking ale, porter, brandy, and other kinds of spirit, even to the extent, at times, of partial intoxication.” He adds, “I reformed: and after I had subdued this appetite for tobacco, I lost all desire for stimulating drinks.”

Dr. M’Allister, in a valuable Essay on Tobacco, one section of which treats on its use “as paving the way to drunkenness,” relates the following instructive example :—“I am well acquainted with a man in a neighbouring county, whose intellectual endowments would do honour to any station, and who has accumulated a handsome estate; but whose habits, of late, give unerring premonition to his friends of a mournful result. This man informed me that it was the fatal thirst occasioned by smoking his segar, in fashionable society, that had brought him into his present wretched and miserable condition. Without any desire for ardent spirit, he first sipped a little gin and water, to allay the disagreeable sensation brought on by smoking, as water was altogether too insipid to answer the purpose. Thus he went on from year to year, increasing his stimulus from one degree to another, until he lost all control over himself, and now he stands as a beacon, warning others to avoid the same road to destruction.”*

The amount of intemperance arising from this cause, if followed to its actual issues, would be truly startling. One writer on the subject, is of opinion that it would amount to not less than *one-tenth* of the drunkards annually made throughout this nation. The practice is, beyond all doubt, a fruitful source of intemperance, and ought, therefore, to be disused by every one who regards the welfare and happiness of either himself or his fellow-creatures.

3. *The use of opium, in its various forms, may also very properly be included in the class of physical causes of intemperance.*

The consumption of opium in this, and in other countries, has, of late years, frightfully increased. One principal source of the habit may, no doubt, be traced to the fact, that it forms an important constituent of a great variety of the patent and popular medicines now so commonly vended in this

* Dr. Trotter’s View of the Nervous Temperament, p. 77.

† Dissertation on the use and abuse of tobacco, by Dr. Adam Clarke, p. 43, ed. 1837.

* A Dissertation on the Medical Properties, and Injurious Effects of the Habitual use of Tobacco, by A. M’Allister, M.D. 1830.

kingdom. The public generally are aware of its medicinal properties, and injudiciously make use of it, not only in cases of extreme necessity, but even on ordinary occasions. Laudanum, a preparation which merely consists of a solution of opium in spirits of wine, is one of the most common forms in which it is thus used.

A recent writer, makes the following remarks, regarding the use of opium in the United States:—"I cannot refrain," says he, "from remarking, since it seems to me of the greatest importance that universal attention be directed to the subject, the *immoderate use of opium in various shapes*, chiefly by way of laudanum, in families, and especially with infants, without the advice of proper physicians. My inquiries into this subject have led me to the conviction that innumerable parents create in their children that diseased craving for stimulants, which with so many individuals ends in open and violent intemperance, and with many more in a constant use of ardent spirits not much less injurious in its consequences."* "Next to the evils produced by alcoholic drinks in this country," (America) says Dr. Lee, "those originating from the use of opium, in its different forms, should undoubtedly be classed. Since it has become unfashionable to take intoxicating liquors, a substitute has been sought and found in opium. Of the immense quantities of this drug imported into the United States, there is good reason to believe, that but a very small portion, indeed a mere fractional part, is consumed by the advice of physicians. All classes, in a greater or less degree, resort to it, as a solace in grief, a remedy for pain, to cheer the spirits, to brighten the intellect, to blunt morbid sensibility, to drown reflection; in short, to change and pervert our nature, and dim the reflection of God's image within us. Although its effects are not as brutalizing and debasing as those of alcoholic stimulants, still they are most destructive to health and happiness. Dr. Madden states, that but few opium eaters in Turkey live to be over thirty years of age. It is worthy of serious consideration, whether opium ought not to be included in the *temperance pledge*."†

The members of temperance societies in this country have also been charged with having had recourse to this pernicious practice as a substitute for intoxicating liquors. No evidence, however, has been adduced to substantiate this statement. The source, moreover, from whence it originated, a paper under the immediate patronage of the "National Association of Licensed Victuallers," rendered the allegation more than a matter of doubt and suspicion. About the same period a police Report, in the *Morning Chronicle*, dated February 5th, 1840, directed the attention of the public to one

source at least of the consumption of opium in this country. William Hare, a "licensed" brewer, residing in Old Kent Road, was summoned on an information, charging him with using deleterious ingredients in the manufacture of beer. It appeared on evidence that one barrel of the defendant's beer on being tested, "was found to contain vitriol and a preparation of opium." There is reason to suppose that this horrid practice is not uncommon.

4. *The immense consumption of spirituous, patent, or quack medicines, contributes greatly to create the appetite for alcoholic stimulants.*

A vast proportion of these popular remedies consists principally of some medicinal articles disguised in a powerful solution of ardent spirits. The difference between habitually taking some of these nostrums and indulging in dram-drinking is, *in effect*, but very small. The reason of their celebrity is no doubt to be found in the stimulus they impart, which by its insidious and apparently beneficial effects, induces the inexperienced to place implicit reliance on their medicinal powers. Of this description is the celebrated "Solomon's Balm of Gilead," which is well known to be principally composed of brandy, and to be used by many as a substitute for that spirituous product. Among the same class, may be included all the various compounds at present sold under the names of "Balsams," "Cordials," "Tinctures," "Drops," and "Elixirs." Most cough medicines, for instance, thus vended, consist of two or three simple cough substances, opium, the universal popular panacea in such cases, and a large proportion of ardent spirits. Infants' preservatives also are generally composed of some trifling stomachic, combined with a preparation of opium in a weak solution of ardent spirit. Indeed, the whole system of popular quack medicine is comprehended in a small compass.—spirituous stimulants and opium, or such medicines as by their potent influence easily secure the admiration of the vulgar. The following illustrations are extracted from Gray's Supplement to the *Pharmacopœia*, a work of undoubted respectability.

Hill's Balsam of Honey.—Balsam of Tolu 1 pound; honey 1 pound; rectified spirits of wine, one gallon, used in "coughs and colds."*

Ford's Balsam of Horehound.—Horehound and liquorice root, of each 3 pounds, water sufficient in quantity to strain six pints, then infuse. To the infusion add proof spirit 12 pints, camphire one ounce and two drachms, opium purified, and gum benjamin, of each one ounce, dried squills two ounces, oil of anise seed one ounce, honey three pounds and a half.†

Gout Cordial.—Rhubarb root, senna,

* Lieber's relation between Education and Crime.

† Bacchus. American Ed. p. 179.

† Gray's Supplement, &c. p. 405.

† Ibid.

coriander seeds, fennel seeds, cochineal, of each two ounces; liquorice root, saffron, of each one ounce, raisins two pounds and a half, rectified spirit of wine two gallons.*

Of a similar character are the following popular specifics: Bateman's Pectoral drops, Jesuit's Drops, Huxham's Compound Tincture of Bark, Daffy's Elixir, Squire's Elixir, Friar's Balsam, and a host of others; all of which contain a greater or less quantity of ardent spirits.

These observations will enable us to estimate, with tolerable accuracy, the amount of intemperance which arises in the present day from so injurious a practice. Thousands of parents are at the present time unthinkingly training up their children to be drunkards, by creating in them from an early period, an appetite for stimulating substances.

Dr. Adam Clarke, in his memoir of his early life, relates an interesting but melancholy case of this description. An individual and his wife, members of a religious society, resided on Portsmouth Common, in decent and respectable circumstances. The wife was frequently troubled with indigestion. She consulted with a neighbour, who informed her that she had been afflicted with a similar complaint, and advised her to purchase a bottle called "Godfrey's Cordial," from which she had received considerable benefit. This remedy recommended, was, to use the words of Dr. Clarke, "*a fine spirituous saccharine opiate*," and being taken as directed, it acted "as an elegant dram." The effects were so pleasing, that the woman declared, that she would never be without it in the house. In a short time, the disorder again made its appearance, and the favourite remedy was as before applied to, and received additional praises. By-and-bye, the husband himself complained of being unwell, and the wife strongly urged him to try the effects of her favourite application. He, of course, must take a stronger dose. The result was equally pleasing. They agreed to take it in company. The wife, although not cured, was very much relieved; and bottles were purchased and taken in quick succession. The husband found it necessary also to have recourse to the same; and by this time they could bear a double dose. By-and-bye more and more was taken, for former doses did not give relief as usual, but the increased dose did; no customers to the quack medicine were equal to these individuals. They bought it at last by the dozen, if not by the gross! Scores of pounds were soon expended on this carminative opiate, till at last they had expended on it their whole substance. Even their furniture went by degrees, till ultimately they were reduced to absolute want, and were obliged to take refuge in the poor-house. In this place the unhappy couple were visited by some charitable and pious

friends, and having expressed contrition for their former unguarded conduct, were assisted by them, and again placed in comparatively respectable circumstances. The kindness of these friends soon prospered their business, and they regained their previous secular and religious standing in society. Unfortunately, however, the wife thought her indigestion and unpleasant feelings had returned, were returning, or would soon return; and she once more thought of the "cordial," with desire and terror. After some little consultation, they agreed that, as they had experience, they might once more recur to the practice without danger. Not to be tedious, adds Dr. Clarke, another bottle was bought, and another, and a dozen, and a gross, and in this way they once more drunk out all their property, and terminated their lives in Portsmouth common workhouse.*

V. *The present system of the medical profession, it is to be feared, has been productive of much intemperance.*

Medical men, like the rest of mankind, have long laboured under the general delusion. Stimulants at one period were almost looked upon by the profession as general specifics. The doctrines of Brown form an example in point, but Brown himself fell a victim to habits of intemperance. The use of wine in cases of fever, originated at an early period. Pliny, the elder, remarks, "*Cardiacorum morbo, unicam spem in vino esse, certum est.*"† The writings of Aretæus and Cælius Aurelianus bear similar testimony. Even physicians of modern times, who have strongly recommended abstinence from intoxicating liquors on ordinary occasions, have been impressed with the opinion that it was an exceedingly valuable remedy in cases of fever. Among the latter class, may be included Dr. Trotter, who looked upon wine, when "directed with due precaution, by far the most efficacious remedy in the low typhus fever."‡ Previous to this, he states, that persons "labouring under typhus fever very frequently consume from four to six pounds of wine in the twenty-four hours, without producing any injurious results."||

Most medical men, in the present day, deprecate the practice which Dr. Trotter so warmly countenances. Dr. Cheyne, late of Dublin, in an excellent Essay on the effects of wine and spirits, ably comments on the absurdity and dangerous consequences of this popular error. "The faculty," says he, "are, in some measure, accountable for opinions very generally held, relative to the innocuous character of wine and ardent spirits; the benefits which have been supposed to flow from their liberal use in

* Life of Dr. Adam Clarke, 1833.

† Pliny's Nat. Hist. lib. xxiii. c. 2.

‡ Essay on Drunkenness, p. 41; also *Medicina Nautica*, vol. i. art. Typhus.

|| *Ibid.* p. 40.

medicine, and especially in those diseases which were once universally, and are still vulgarly, supposed to depend upon mere weakness, have invested these agents with attributes to which they have no claim; and hence, as we physicians no longer employ them as we were wont to do, we ought not to rest satisfied with a mere acknowledgment of error; but we ought also to make every retribution in our power, for having so long upheld one of the most fatal delusions which ever took possession of the human mind." "Let us," continues the same physician, "contrast the quantity of wine employed in the treatment of fevers, in the present day, with that which was consumed thirty years ago. There lies before me a table constructed at a fever hospital in Dublin, from which it would appear, that for nearly 1500 patients, a great number of the cases being spotted, there were ordered 17,147 ounces of wine, which is considerably less than a pint each. From my recollection of former times, I can aver that those patients would, thirty years ago, have been allowed at an average, at least a pint of wine a day, which would have caused great increase of suffering, and probably great increase of mortality also. Now that we are enabled, by superior opportunities of observation, and by our dissections, to fix the seat of fever, and to show that the disease, in many of its grand divisions, resides in some one organ, and not in the whole body, we can actually demonstrate the pernicious effects of wine."* And further, "With many an unfortunate patient, the immediate cause of death was not the fever, but intoxication during fever, while all who escaped were supposed to owe their recovery to wine. Our excellent fever hospitals have at last opened our eyes, and we now look with as much disgust on our former malpractices, as, I trust, a more temperate generation will, upon the excesses of their progenitors."†

In cases of fever with high excitement, the proportionate collapse which naturally follows, often requires a small proportion of wine or other cordial, to let down the morbid action of the system, or in other words, to keep up the patient's strength; and hence, as Dr. Cheyne correctly remarks, "in the natural extension of the error, it is supposed, that as strong liquors sustain those debilitated by disease, much more will they add to natural vigour, and support a healthy man during an exertion of body, under which his unassisted powers of constitution would fail." This fatal error, fortunately for mankind, is now being rapidly exploded.

An additional proof, in corroboration of the diminished consumption of spirituous liquors in the treatment of disease, may be

found in a report of the Baltimore Almshouse Infirmary. In this charity, there were, in the years 1828 and 1829, four thousand and forty patients; and as a proof that the medical treatment pursued in this hospital was successful, it may be stated, that of this number only three hundred and twenty-two died, one hundred and two of which cases consisted of pulmonary consumption. During the two years in question, the whole of the spirituous liquor used did not amount to more than thirty gallons, in addition to a quantity of whiskey, solely employed in the preparation of stimulating liniments, and other medicinal preparations. This among four thousand and forty patients, during two years, amounts to fifteen gallons per year only, and not more than one quarter of a glass of spirits for each patient during the period of twelve months. Even this small amount will be materially diminished, when the quantity, in all probability, drunk by the attendants and other domestics of the establishment is also taken into consideration.

Mr. T. Beaumont, of Bradford, President of the Bradford Medical Association, a gentleman whose professional skill is only equalled by his spirit of benevolence, observes, that "in the treatment of almost all diseases, a stimulating regimen is decidedly hurtful." This writer makes the following judicious remarks:—"I can readily suppose that many recoveries have been protracted, if not prevented, by siezing the first opportunity that presented itself, on the subsidence of the more active symptoms; for commencing a course of stimulation, by which the dying embers of the disorders have been again lighted up; and secondary symptoms have been established, which have either terminated in death, or in the establishment of a sequela, of difficult and uncertain removal. For the most part, therefore, I am of opinion, that CONVALESCENCE from fevers and other active complaints, would be greatly promoted by a light and nutritious diet, to the exclusion of all alcoholic stimulants. Indeed, both distilled and fermented liquors, should be entirely banished from the sick room, except in very peculiar cases, which of course are of comparatively rare occurrence.—All things considered, I believe it would be found, as a general rule, to which there are exceptions of course, that the recovery of patients from almost every disorder, will be more successfully promoted by avoiding altogether the use of these beverages, which have been so long considered, as almost the most important adjuvants in such circumstances; and of the injurious tendency of which, my own observation and experience, has furnished striking and undeniable evidence."*

It is a matter of pleasing congratulation

* A Letter on the Effects of Wine and Spirits. Dublin, 1829, pp. 2, 3.

† Idem. p. 4.

* Essay on the Nature and Properties of Alcoholic Drinks, pp. 40, 41, 1838.

that the practices now referred to have been considerably disused among the more enlightened section of the medical profession. Much, however, yet remains to be accomplished. An examination of the authorized books of the profession, and in particular of the London Pharmacopœia, displays a most extensive use of alcohol in various medicinal preparations. In this authentic and collegiate authority, no less than one hundred and thirty compounds are exhibited and sanctioned, of which spirit of wine forms the vehicle and preserving component. These may be enumerated under the following heads:

Tinctures, in number,	81
Wines, ditto	12
Spirits, ditto	37
<hr/>	
Total	130
<hr/>	

The bulk of the people in the present day make use of some of these preparations, for example, paregoric elixir, (tinct. camphoræ comp.) tincture of rhubarb, (tinct. rhæi,) and laudanum, (tinct. opii.) almost as commonly and indiscriminately as the most familiar articles of diet. In most druggist's dispensaries it is common for individuals to purchase these articles, and to swallow them on the premises; as inconsiderably indeed, and as unconcernedly, as the votary of Bacchus indulges in his noxious potation. Drug establishments thus form powerful auxiliaries to this appetite-creating cause of intemperance.

"The habitual use of tinctures and medicinal drams," says Dr. Reid, in his work on Nervous Affections, "can be regarded only as a more specious and decorous mode of intemperance. In this may be said to consist the privileged debauchery of many a nervous valetudinarian. A female of decorum and delicacy, may thus most effectually ruin her health, without in the slightest degree impairing her reputation. She may allay the qualms of the stomach, without the danger of occasioning any disagreeable qualms of conscience.

The prescriptions of medical men are often principally composed of these spirituous compounds. By this means they undesignedly become the means of creating a taste for stimulating drinks. Several testimonies in point, of men of high rank in the profession are now adduced."

"There can be no doubt," says Dr. Trotter, "that many persons have to date their first propensity to drinking to the too frequent use of spirituous tinctures as medicines, rashly prescribed for hysterical and hypochondriacal complaints." "There are patients," he further observes, "who are continually craving after medical novelties, and are in the practice of taking every article that is warming and cordial.* It is to be feared, also

that medical men have done considerable injury to society by the frequent recommendation which they have given to the use of ardent spirit and other kinds of intoxicating liquors to their patients, not on special occasions only, but as a portion of their ordinary diet. By this means many individuals unfortunately acquire a *taste* for inebriating compounds, and eventually become drunkards.

Dr. Falconer observes that some medical men have unfortunately been led to give a most exceptionable direction with respect to diet, that of substituting brandy or rum diluted with water, for common drink; and it is not only prescribed in extraordinary cases, as a temporary expedient, but is frequently directed in almost all cases of any weakness in the stomach or digestive organ, as a *perpetual article of diet*. He very justly adds, that no circumstance ever occurred in medicine more injurious to the science, or fatal to mankind, than this unfortunate piece of advice.* Dr. Fothergill and Dr. Ferriar, two physicians of considerable eminence, both advert to the injurious consequences arising from this practice. Dr. Fothergill acknowledged that he had made many drunkards by having advised persons in certain complaints to drink a little spirit and water. What they had used at first as a medicine they continued to indulge in, from contracted taste and habit. Adair in his Medical Cautions, states, that Dr. Fothergill made this declaration sometime before his death, and although one of the first to sanction the practice, he sincerely repented of the injury his example had created.† Dr. Ferriar remarks that the lives of many patients have been embittered by the thoughtless encouragement which some practitioners have given to the use of ardent spirits, and that he himself had seen most melancholy instances in which habits of dram-drinking had been thus acquired, under the sanction of their medical attendants, by persons not only temperate, but delicate in their moral habits.

Dr. Mussey, of America, relates an instance of this kind, which came under his own observation. I once knew, says he, a man who had been for some time in the habit of intemperate drinking, and who had, at times, remonstrances of conscience. These admonitions, together with the motives and encouragements held up to him by his kind and good wife, induced him to make a solemn vow, "that, by the help of God, he would never again drink anything stronger than beer, unless prescribed for him as a medicine by a physician." He regarded the vow, became sober and apparently religious, and for several years sustained the character of a devout man. At length, he lost, by

* Dr. Falconer's Observations on some of the articles of diet and regimen, usually recommended to valetudinarians, p. 45, &c.

† Adair's Medical Cautions, second Ed. p. 245.

* Trotter's Essay on Drunkenness, p. 190.

degrees, his religious sensibility, grew dull and stupid, heedless alike of religion, and of the daily attention to business necessary for the support of his family; and, eventually, died besotted with rum. When warned of his danger, soon after it was known that he had returned to his cups, he assigned as a reason, the prescription of a physician, which was made on his application for relief from mild dyspepsia.*

Dr. J. Baxter, of the United States, observes:—"I am so far from thinking that the use of ardent spirit is beneficial in cases of dyspepsia, and chronic debility, that I consider it an absolute evil frequently productive of both, and often, under the form of bitters, cordials, &c., prolonging and increasing such complaints indefinitely. I have no doubt that physicians have often opened the way to, and encouraged, tippling and drunkenness, by the prescription of tinctures, cordial tonics, &c., and to which the doctrines and theories of the old school but too much led."

Dr. Bell, of America, Editor of the *Journal of Health*, remarks: "Physicians have much to answer for when they recommend to, or allow, their patients to make use of spirituous or wine bitters, either with a view of accelerating their convalescence after acute diseases, or of giving strength and tone, as the phrase is, to the stomach, in those of a more lingering character. By this practice they make drunkards of many good and even pious men, who are not themselves aware of their danger, until the habit has become too inveterate and deeply fixed for its abandonment. They do this, moreover, without any justifiable reason or palliative motive, since such remedies as those just indicated are rarely if ever called for. We have seen the function of many stomachs irrecoverably destroyed by the use of bitter tinctures; and, in other cases, relief only obtained, by entirely desisting from their use: but in no instance, are we aware that their administration was imperatively required. They are often recommended and advertised as cures for dyspepsia or indigestion. Now we have no hesitation in saying, that if a healthy person wishes to create for himself dyspepsia, or convert a mild into an obstinate attack of the disease, he has only to take to the use of bitter tinctures, or bitters, as they are commonly called."†

Dr. Gordon mentions a case which may well serve as a warning to persons placed in like circumstances:—"I was requested," says he, "to see an individual who was

supposed to be deranged; but, on visiting him, I found he had delirium tremens, a disease which is the peculiar product of drunkenness. Upon stating the fact to his family, they remarked that it was utterly impossible, for that he took but two glasses of sherry at his dinner, and never tasted spirits. It afterwards appeared, upon enquiry, that the individual, who was in one of the public offices, had been frightened at the idea of cholera, and being told that brandy was the best preventive, he had, on coming to town to his office, taken a minute quantity of brandy, never taking it at home or to excess; but he so acquired the habit of taking a little every day, that he could not dispense with the stimulus. In six months he was attacked with delirium tremens, and narrowly escaped with his life."*

Mr. Upton, a medical man in extensive practice in and about the metropolis for about thirty years, made, in 1817, the following statement to J. Poynder, Esq., late Under-Sheriff for London and Middlesex:—"A vast number of women have been taught to drink, in the middle and the higher classes, by taking indiscriminately quack medicines, containing alcohol, hot seeds, and essential oils; such as Rymer's Tincture, for gout in the stomach, Solomon's Balm of Gilead, &c. I have professionally known these articles taken to a degree of intoxication and inducing habits of dram-drinking. I have been informed, from very good authority, that Dr. Solomon has laid the foundation of this destructive habit in some thousands of people in Liverpool and its environs. I have known many respectable characters who have, I believe, from ignorance, fallen into this snare, where close application to any particular pursuit, which has a tendency to produce sinking in the stomach, has led, imperceptibly, to an indulgence in this bewitching liquor."

"I am afraid," says a well-known physician, "that the practisers of physic have, inadvertently, been instrumental, by giving compound waters, (spirituous liquors) as medicines, in introducing the execrable custom of drinking drams, which at present does not only prevail amongst the vulgar, but has made no small progress among people of rank and distinction; inasmuch, that if it increases for forty years more, in proportion as it has done for the last half century, there will be no occasion for a second deluge, or a conflagration, to exterminate the whole human species from the face of the earth; for those, who are habituated to drams, in a certain degree, cannot long subsist themselves, and are absolutely *deprived of all hopes of leaving behind them a tolerably healthful progeny.*"†

"So apprehensive am I," says Dr. Rush,

* Address on Ardent Spirits; read before the New Hampshire Medical Society, and published at their request, by R. D. Mussey, M.D., President of the Society, and Professor of Anatomy and Surgery in Dartmouth College.

† *Journal of Health*, vol. 1, p. 200, 1830.

* Parliamentary Report. p. 196.

† *Pharmac. Universalis*, by R. James, M.D., 1752.

"of the danger of contracting a love for spirituous liquors by accustoming the stomach to their stimulus, that I think the fewer medicines we exhibit in spirituous vehicles the better."

"I never prescribed ardent spirits," observes Dr. Farre, "but as a medicine, and I have been often prevented from prescribing ardent spirits, when I thought them necessary in moderate quantities, for fear of the habit."*

The duties of a medical man are of a peculiarly responsible character, and his influence carries with it a vast amount of good or evil, in relation to the interests of society. It is, therefore, a matter of paramount necessity, that his conduct and advice should be so carefully regulated, as not to be productive of injurious consequences. The health, and, in some respects, the morals of the public, are entrusted to the charge of the medical profession; and this highly important trust ought to be guarded with circumspection and zeal. It is a fortunate circumstance, that the attention of medical men has, of late years, been directed, with some degree of earnestness, to this subject. In this they not only perform a duty which they owe to the public, but as they are bound, make amends for errors and their consequences, which have been too long continued under the sanction of their authority.

These views are not promulgated by isolated individuals only, as the testimonies of medical societies, that have especially investigated the subject, will sufficiently demonstrate.

The Western District, New-Hampshire Medical Society, passed the following among other resolutions agreed to on this subject:—"That we disapprove of the former practice of physicians, which is too much adopted by some of the present day, of prescribing ardent spirits, either in their simple state or medicated with bitters, &c., to patients in chronic affections and in the stage of convalescence of most diseases, as the operation tends to confirm or reproduce the primary complaint, and what is not less pernicious, to create an habitual desire for their continuance, till the subjects of this ill-advised practice insensibly become slaves to *intemperance*."

The following remarks are extracted from the Report of the Committee of the Philadelphia Medical Society, 1829:—"The spirituous nature of *tinctures* alone, forms a strong objection to them as a class of remedies. There is no doubt that many cases of intemperance have owed their origin particularly to the use of bitter tinctures. Considering the small amount of useful medicinal matter which enters into these latter compounds, and the large pro-

portion of alcohol they contain, it appears to admit of a fair inquiry, whether they would not be better expunged from the Pharmacopæia. To attempt to cure intermittent fever by the unaided powers of tincture of bark and quassia, would be considered unwise by any one; while, at the same time, these are abundantly sufficient to produce a habit of intemperance, and, not very unfrequently, are really its efficient cause. One of your committee has met with a case, where an individual of the most correct and delicate deportment, actually acquired habits of intemperance and was brought to the brink of the grave, by the means, unsuspected by herself, of the *compound spirits of lavender*."

The Committee of the New York Temperance Society, in their Report for 1835, state, that "A celebrated professor of *Materia Medica*," more than twenty years ago, declared his opinion, that "*a large proportion of the drunkards were made so by the prescriptions of medical men*." The Medical Society of the city and county of New York, after quoting the above and other authorities on the same point, make the following declaration: "The *daily* and *habitual* use of ardent spirits, as a medicine, and especially in the form of bitters, cordials, and elixirs, of which alcohol in some form is the base; and with which quack medicines, the country has been deluged, is one of the most prominent causes of forming intemperate habits and appetites, and ought to be universally abjured."

The following resolutions of the Massachusetts Medical Society are corroborative of the same view of the subject: "That this Society agree to discourage the use of ardent spirits as much as lies in their power; and for this purpose, to discontinue the employment of spirituous preparations of medicine when they can find substitutes;" and also, "that the excessive and constant use of wine is, in the opinion of this Society, a cause of many diseases; and that, though it is useful in some of them (as in the stage of weakness in fever) its use is, in some cases, often carried too far, and continued too long."

The annual Report of the Committee of directors of the Lunatic Asylum, Glasgow, for 1829, on which Committee are placed two medical professors, a physician and several surgeons, states the following among other causes of insanity:—"Some allege, that they became addicted to the use of intoxicating liquors, for the purpose of relieving bodily pain and languor, or the depression of mind occasioned by afflicting events. Some ascribe their evil propensity to bad example; some to the pernicious custom of having been indulged with the frequent use of ardent spirits in their early years: *and not a few females, to the use of palatable cordials, administered to them remedially, and especially during in-lying, by kind but injudicious friends*:" and the

* Parlian. R. Report, p. 102.

Report afterwards adds, "great care ought to be taken to guard against the insidious approaches of *the enemy* in disguise, whether in the inviting form of some luscious liqueur, or under the *friendly* aspect of stomachic tincture, or cordial balm."

This branch of our inquiry may be very appropriately concluded by a quotation from an Essay of very great value and importance, written by Dr. Mussey: "So long," says he, "as alcohol retains a place among sick patients, so long there will be drunkards; and who would undertake to estimate the amount of responsibility assumed by that physician, who prescribes to the enfeebled dyspeptic patient the daily use of spirit, while, at the same time, he knows that this simple prescription may ultimately ruin his health, make him a vagabond, shorten his life, and cut him off from the hope of heaven. Time was when it was used only as a medicine, and who will dare to offer a guarantee that it shall not again overspread the world with disease and death?" "Ardent spirit," adds this patriotic physician, "already under sentence of public condemnation, and with the prospect of undergoing an entire exclusion from the social circle, and the domestic fireside—still lingers in the sick chamber, the companion and pretended friend of its suffering inmates. It rests with medical men to say how long this unalterable, unrelenting foe of the human race, shall remain secure in this sacred, but usurped retreat. They have the power, and theirs is the duty to perform the mighty exorcism. Let the united effort soon be made, and the fiend be thrust forth from this strong but unnatural alliance and companionship with men, and cast into that 'outer darkness' which lies beyond the precincts of human suffering and human enjoyment."*

SECTION III.

POPULAR FALLACIES A CAUSE OF INTEMPERANCE.

Pure water is the best for persons of all temperaments: it promotes a free and equable circulation of the blood, on which the due performance of every animal function depends. Water drinkers are not only the most active and vigorous, but the most healthy and cheerful.—FREDERICK HOFFMAN.

The more simply life is supported the better, and he is happy who considers *water* the best drink.—Dr. PARIS.

I. That Intoxicating liquors are beneficial in enabling men to endure a greater amount of physical exertion.—II. That Inebriating compounds counteract the effects of cold.—III. That Strong drink is beneficial in hot weather or in tropical regions.—IV. That Intoxicating liquor is a safe remedy in severe colds or in circumstances of laborious employment in cold and damp situations.

AMONG the numerous objections made in reference to an abandonment of the use of

intoxicating liquors, are those by which their necessity is urged as a restorative of strength in cases of extraordinary physical exertion.

I. One of the most deeply rooted of these notions is, that which supposes stimulating liquors *to be beneficial in enabling men to endure a greater amount of physical exertion*. Intoxicating liquors merely stimulate or accelerate the vital actions, and do not increase the actual strength of the physical powers; on the contrary, by calling those powers into unnatural action, they diminish their permanent capability, and thus exhaust that vital energy, which, unless thus improperly interfered with, is capable of undergoing extraordinary and long-continued exertion, supported and renovated only by plain and wholesome nutriment.

This important fact was well known to the ancients, among whom physical improvement was made a regular branch of education, and who knew by experience that *those who abstain altogether from the use of intoxicating liquors, are best enabled to attain the greatest amount of physical strength*. Cyrus, after the Medes and Hyrcanians had returned from pursuing the Assyrians, and were sat down to a repast, desired them to send some bread only to the Persians, who would then be sufficiently provided with all they required, either for eating or drinking. Hunger was their only sauce, and the water which they were enabled to procure from the river was their only drink. To such a diet they had been accustomed from the earliest period of their lives. The Roman soldiers, during their arduous and successful campaigns, made use of vinegar and water only, in order to assuage their thirst. Each soldier was obliged to carry a bottle of vinegar on his person, and when necessary, he mixed a small portion of it with water.* The Carthaginian soldiers were expressly forbidden to taste wine during their campaigns. The same may be said of other mighty nations among the ancients. What armies, the narrations of whose exploits are recorded in history, ever endured anything like the amount of labour, or signalled themselves by victories so triumphant in their character, as those of these celebrated nations? Facts of this nature present the most indubitable proof, that in ancient times the use of intoxicating liquors was not considered necessary for the preservation of bodily health, nor were they, on any occasion, made use of to enable mankind to endure extraordinary fatigue.

After their numerous victories, and when they had in some degree become vitiated by the enervating customs of the nations whom they had conquered, the Roman soldiers acquired a love of wine. When the people complained to the Emperor Augustus of the dearth and scarcity of wine, he replied,

* Temperance Prize Essay, by Dr. Mussey. Washington, 1835.

* Lips. De Re Militari Romanæ.

"My son-in-law, Agrippa, has preserved you from thirst by the canals which he has made for you."* A well-merited reproof of their unworthy and degenerate conduct.

The Emperor Pescennius Niger, made use of a similar observation. He was remarkable for his love of discipline, and in conformity with the ancient regulation never suffered his soldiers to drink wine; water mingled with vinegar was their customary beverage. This gave considerable umbrage to the soldiers. Niger, however, resolutely insisted on their compliance. On one occasion, some soldiers who guarded the frontiers of Egypt, requested him to supply them with some wine; "What do you say?" he replied; "you have the delicious waters of the Nile, and wine is unnecessary for you." At another time, some of his troops having been conquered by the Saracens, by way of excuse, pretended that this event was owing to their interdiction from wine. "An excellent reason," said Niger, in reply, "for your conquerors drink nothing but water!"

Boadicea, Queen of the *Iceni*, A.D. 61—urged the subsequent degeneracy of the Romans, as an argument against their prowess in battle. While preparing for action, to avenge the wrongs which had been inflicted on her people by their cruel conquerors, this intrepid female made an eloquent appeal to her army, in the course of which she drew a striking comparison between the effeminate habits of the Romans, and the simple but invigorating practices of her own country. "*To us,*" she observed, "*every herb and root are food; every juice is our oil, and WATER IS OUR WINE.*"—*παν σε υδωρ οινος.*

The experience of modern armies, in most respects corresponds with that of the ancients. The soldiers of Oliver Cromwell, for example, during their laborious campaigns, carried with them knapsacks containing oatmeal, which when hungry they mixed with water. On this diet, for a considerable period, they principally subsisted, and sustained great fatigue in the full vigour of health. Such also at that, and earlier as well as later times, was the constant practice of the Scotch armies, whose athletic powers are quite proverbial.

Dr. J. Barker, of the United States, relates that when General Jackson was once asked, if soldiers required spirituous liquors, that commander immediately remarked, he had observed, that in hard duty and excessive cold, those performed the one, and endured the other better, who drank nothing but water.

A respectable individual who had been for thirty years in the army, informed Professor Edgar, of Ireland, that he had been in twenty-seven general engagements, had suffered every vicissitude of weather, and

had not unfrequently found his companions dead by his side. Not many years ago, he and above one hundred and thirty others, left England, for active service abroad; of these, five were then living; and he attributed the preservation of their lives to their having entirely abstained from the use of strong drink. A gentleman who heard this interesting statement, adds the following corroborative testimony:—He had served for the period of thirteen years in the hottest climates; he had since been exposed to the severest winters of Canada, and to the rapid changes of the American climate; he had nine times crossed the Atlantic; and attributed his sound health, being then in his fiftieth year, to his having abstained entirely from the use of intoxicating liquors.

Dr. Jackson, a gentleman of great eminence, in a communication addressed to Sir J. Sinclair remarks:—"I have wandered a good deal about the world, and never followed any prescribed rule in anything; my health has been tried in all ways; and by the aids of temperance and hard work, I have worn out two armies, in two wars, and probably could wear out another, before my period of old age arrives; I eat no animal food, drink no wine or malt liquor, or spirits of any kind: I wear no flannel, and neither regard wind nor rain, heat nor cold, where business is in the way."* This individual was at one period head of the medical staff in the West Indies. He also served in the Southern districts of the United States, during the revolutionary war.

"For weeks together," says a recent writer, "I seldom entered a house which was not the scene of human suffering. Associating with disease and pestilence, I conversed at the bed-side of the fever patient, and rubbed the muscles of the victim of cholera.—I had been exposed to the effects of solar heat, night-damp, rain, cold, hunger, and fatigue. Few people, perhaps, ever enjoyed so large a measure of health as fell to my lot during my wanderings in the western parts of inhabited AMERICA, and at no period of life did I possess so much mental and bodily vigour. While I gratefully acknowledge my health and strength to have emanated from divine agency, I may state my habits were strictly temperate, having denied myself every liquid but water and tea. The trammels of society prevented me trying the effects of absolute temperance at an earlier period, but they exceeded my expectations, and from experience I recommend temperance to all who wish to enjoy life."†

The testimony of such nations as in the present day, abstain entirely from the use of intoxicating liquors, is highly worthy of consideration. Among these, we have several examples of a very interesting and conclusive character.

* Code of Health and Longevity, by Sir. J. Sinclair, p. 387.

† Shirreff's Tour through North America, in 1832

* Sueton. in vitâ Augusti.

Mr. Buckingham states that in his Eastern Travels, he met with men among the nations of water-drinkers, whose height seldom averaged less than from five feet eight inches to six feet, and whose general robust and healthy appearance exhibited a very remarkable contrast with the sickly, emaciated bodies of the Europeans. In Hindostan, for instance, though the labour is as severe as in any part of the world, and performed principally under the influence of a vertical and burning sun, yet the inhabitants drink only water. One species of exertion to which they are subject is unknown in England, and strikingly exhibits their muscular force and capability. When individuals undertake long and fatiguing journies, such, for instance, as from Calcutta to Delhi, they are not carried by horses in carriages, but by men, in palanquins, who, naked to the waist, walk, or rather trot at the rate of five or six miles an hour, the perspiration trickling from their pores like rain, and *yet these men drink nothing stronger than water.*

During Mr. Buckingham's residence at Calcutta, a number of men came down from the Himalaya mountains, for the purpose of exhibiting their strength. Mr. Buckingham and several Europeans went to see them, and he was astonished and delighted to witness such beautiful figures. "There they stood," says he, "like the statue of Hercules, with all their muscular powers finely developed, their broad and expansive shoulders and breasts, with their firm muscles like rolling waves, and such as he had never before seen, but in the sculpture of the ancients. The Europeans anxious to test their strength, selected some of the best men they could from among the English grenadiers, and the vessels in the harbour, in order to excel them in feats of strength; but with all the efforts they could make, in lifting, hurling the discus, vaulting, running, and wrestling, each of the Indians in question, was found equal to one and three quarters of our men. *The former, nevertheless, had from their infancy upwards, never tasted anything stronger than water.*"

Smollett, in his Travels to Italy, remarks, in opposition to the general notion that beer strengthens as well as refreshes the animal frame, that the porters of Constantinople, who never drink anything stronger than water, will carry a load of seven hundred weight, which he observes, is a labour that no English porter would attempt to undertake.

Mr. Pinkerton observes, that in the Southern climates, where the vice of drunkenness is almost a stranger, even a porter or a drayman will prefer a glass of ice or lemonade to any strong beverage whatever; and with this light regimen, he further remarks, the Turkish porters are said to be the strongest in Europe, and to carry burdens which would appal an English lighterman, after he had swallowed four pots

of porter. The idea, concludes this writer, that a person's strength is increased by such excesses must therefore be futile; and a Chinese porter, with his tea, is another proof of the opposite position.*

The Bedouin Arabs also, whose duties are of the most fatiguing and harassing description, perform their labours in the most cheerful manner, with very little nutritious food, and with no drink stronger than water.

A modern traveller thus describes them:—"The Bedouins of the caravan, whose duty it is to drive the camels, are the most indefatigable fellows in the world; from daylight in the morning, they are on foot in the front, shouting constantly to keep the animals together. On finishing the journey, they unload them, and arrange the camp, then follow them to pasture, and tend them lest they stray, till nightfall; when they gather into their proper places, and rub tar over those that have the mange, or have been sheared. They sleep in the midst of their charge, ready to jump up on the least noise or motion, and take their turn in the guards of the night. An hour before the camp is in motion, they are on the alert in the morning, to commence the labour of a new day. They sleep like dogs whenever they have a moment to spare, and endure all this with no other food than coarse bread and a few vegetables; and with nothing to drink beyond the indifferent water of the way."†

Among other interesting facts of a similar description, may be cited one concerning the Gauchos, inhabitants of the Pampas, related by Sir Francis Head, who himself witnessed their interesting habits. Riding, it appears, forms their principal, and indeed almost their only exercise. They will continue on horseback day after day, galloping over their boundless plains, under a burning sun, and performing labours almost of an incredible description. Sir Francis, very forcibly points us to the cause of this extraordinary physical capacity. "*As the constant food of the Gaucho is beef and water*, his constitution is so strong, that he is able to endure great fatigue, and the distances he will ride, and the number of hours he will remain on horseback, would hardly be credited."

Sir Francis Head then proceeds to add his own testimony in proof of the correctness of the above remarks. "When I first crossed the Pampas, I went with a carriage, and although I had been accustomed to riding all my life, I could not at all ride with the Peons (drivers of the carriage) and after galloping five or six hours, was obliged to get into the carriage; *but after I had been riding for three or four months, and had lived upon beef and water, I found*

* Pinkerton's Recollections of Paris, in the year's 1802-3-4-5. Vol. ii. chap. 25, p. 340.

† Skinner's Travels, vol. ii. p. 109.

*myself in a certain condition, which I can only describe by saying, that I felt no exertion could kill me, although I constantly arrived so completely exhausted, that I could not speak, yet a few hours sleep on my saddle, or on the ground, always so completely restored me, that for a week I could daily be upon my horse before sunrise, could ride till two or three hours after sunset, and have really tired out ten or twelve horses. This will explain the immense distances which people in South America are said to ride, which I am confident could only be done on beef and water."**

The fallacious notion that the fatigue of travelling is lessened by the use of wine, is completely disproved, by a trial of the contrary practice. "The delusion of this practice," remarks Dr. Cheyne, of Dublin, "I was first led to suspect, by the result of a long journey which I once made in the mail coach, while in a state of great anxiety. I travelled nearly 700 miles, almost without stopping, having been five nights out of six in the coach, during which time, I could not have slept half as much as usual, and the sleep I obtained was unsound and interrupted. During the whole time, I lived chiefly on bread and tea, with a small portion of animal food once a day. I drank no malt liquor, wine, or spirits. At the end of my expedition I was scarcely more exhausted than when I set out. During the journey I had several opportunities of seeing persons who gorged themselves two or three times a day, and guzzled as much as the time while the carriage halted, would permit them to do, completely worn out by journeying for one or two nights."†

Dr. Carrick, Senior Physician to the Bristol Infirmary, says, "There are whole nations where spirituous or fermented drinks are unknown or unused; yet in these nations there are laborious occupations, and strong and healthy people: an irresistible proof that such liquors are *not necessary* to man. Although the smith, the glass-blower, or the coal-heaver may be able to do more work in a short time by the force of liquor, he would be able to work more hours in the day, and more days in the year *without* it; would have done more work by the end of the year, and certainly would live many more years to work; and not only live, but live in the enjoyment of comparative health, wealth and comfort."

Almost all of our modern warriors celebrated in the pages of history, found that by abstinence from intoxicating liquors alone, they were enabled to undergo the vast amount of labour which they were called upon to perform. Charles XII., King of Sweden, who endured bodily exertion almost superhuman in its character, under circumstances which destroyed thousands of his

brave troops, denied himself, from a very early period of his life, the use of all intoxicating liquors. Bolivar, who was capable of enduring great fatigue, and was, moreover, a horseman of unusual boldness, was extremely abstemious. General Elliot, (afterwards Lord Heathfield,) is said to have been the most abstemious man of his age. He never indulged in any kind of intoxicating liquor, and by his temperate habits acquired such hardiness of body, as rendered undertakings which would be to others of much difficulty, to him not only easy of accomplishment, but healthful and agreeable. Of Don Pedro, Colonel Hodges, in his recent publication thus speaks. "I must notice his extreme temperance, *He never takes wine, water is his usual beverage*; even coffee he abstains from. Health the most vigorous, and uninterrupted, is the almost necessary consequence of his mode of living. His strength of muscle is very considerable, and he takes no small delight in lifting and carrying heavy weights, and performing other similar feats, to prove his bodily powers."*

Brindley, the celebrated engineer, observed, in the various public works in which he was engaged, where the workmen were paid by the piece, and each man consequently exerted himself to earn as much as possible, those from the North of Lancashire and Yorkshire, who partook of their customary fare,—oat cake and hasty pudding, with water for their drink, sustained more exertion and obtained greater wages than others who lived on bread, cheese, bacon, and beer, the usual diet of the labourers of the South.

A volume might be filled with illustrations of a similar character. They most decidedly show that alcoholic stimulants are not necessary to attain the greatest amount of animal strength, or to enable men to sustain the greatest portion of corporeal fatigue.

II. *A very popular and deep-rooted notion obtains, that mankind cannot exist in a state of health, in cold climates, and during extreme cold, without the use and aid of intoxicating liquors.* "There cannot be a greater error," observes Dr. Rush, "than to suppose that spirituous liquors lessen the effects of cold on the body. On the contrary, they always render the body more liable to be affected and injured by cold. The temporary warmth they produce is always succeeded by chilliness.† Intoxicating liquors produce only a temporary stimulus, which is quickly succeeded by animal depression. They cannot, therefore, impart any *permanently* beneficial influence. "Not a more dangerous opinion exists, remarks a British General Officer, "than the notion that the habitual use of spirituous liquors prevents the effects of cold."

One of their first effects, indeed, is to deprive the system of that self-resisting

* Rough Notes taken during some Rapid Journeys across the Pampas, and among the Andes, p. 19.

† Letter on the Effects of Wine and Spirits, p. 7.

* Expedition to Portugal, by Col. Hodges.

† Inquiry into the Effects of Spirituous Liquors, by B. Rush, M.D.

power with which nature has endowed it for extraordinary occasions.

A number of interesting facts have of late years come to light in relation to this important question, which demonstrate in the most indisputable manner, the positive injury which arises from the use of stimulating liquors in northern latitudes.

Dr. Aikin was one of the writers who first attempted to draw the attention of the public to this fatal delusion. He details several striking examples of unsuccessful voyages made to the high northern latitudes, the failure of which, he distinctly shows, was principally to be attributed to the free use of ardent spirits. On the contrary, he found that in those cases where the men drank *nothing but water*, they were best enabled to endure the vicissitudes of cold and wet, and were successful in their expedition.*

The Rev. Dr. Scoresby, vicar of Bradford, was for many years a resident in the high northern latitudes. The following is the result of his experience, as stated in his examination before the Committee of the House of Commons, in 1834:† “My principal experience has been in severely cold climates, and there it is observable, that there is a very pernicious effect in the reaction, after the use of ardent spirits.” “I did not use them myself, and I was better, I conceive, without the use of them.” “I am well assured that such beverages as tea or coffee, or I doubt not, milk and water, are in every way superior, both for comfort and health, for persons exposed to the weather, or other severity—*spirits are decidedly injurious in cold climates*. The men who have been assisted by such stimulus, have been the first who were rendered incapable of duty. They became perfectly stupid, skulked into different parts of the ship to get out of the way, and were generally found asleep.” “In the case of a storm, or sudden difficulty, I should most decidedly prefer the *water drinkers* to those who were under the influence of any stimulant. The latter are unspeakably more liable to accidents.”

Sir John Ross, also from personal experience, arrives at the same conclusion. When in the arctic regions, and subjected to severe labour, he proposed to his men (having previously tried, with success, the experiment upon himself,) that they should abandon the use of spirituous liquors; which was done with the most gratifying results. Previous to this event, Sir John Ross engaged in an overland expedition, through difficulties of the most formidable description. The men suffered from inflamed eyes, a common occurrence to the party when exposed to the snow and heavy wind. June 7th, 1830, Captain Ross remarks, “At seven we arrived

at the ship, after an absence of nearly nine days, and found everything right, and all in good health. If it is but justice to the men to say that they exerted themselves to the utmost, they deserve even more praise for a very different display of obedience and self-devotedness. As I was the only person who drank no spirits, and was the only person who had not inflamed eyes, I represented that the use of grog was the cause, and therefore proposed that they should abandon this indulgence; showing, further, that although I was very much the oldest of the party, I bore fatigue better than any of them. There was no hesitation in acquiescing; and the merit was the greater, since, independently of the surrender of a seaman's fixed habits, they had always considered this the chief part of their support. Thus we brought back all of this stock which had not been consumed the first day.”

“It is difficult to persuade men, even though they should not be habitual drinkers of spirits, that the use of these liquors is debilitating instead of the reverse. The immediate stimulus gives a temporary courage, and its effect is mistaken for an infusion of new strength; but the slightest attention will show how exactly the result is the reverse. It is sufficient to give men, under hard and steady labour, a draught of the usual grog, or a dram, to perceive that, often in a few minutes, they become languid, and, as they generally term it, faint; losing their strength in reality, while they attribute that to the continuance of the fatiguing exertions. He who will make the corresponding experiments on two equal boats' crews, rowing in a heavy sea, will soon be convinced that the water drinkers will far out-do the others.”*

November 26th, 1831, Captain Ross, after surveying a number of experiments, adopted with a view of preserving the health of the men during their protracted and severe exposure to cold, of from 50° to 80° below the freezing point, says, page 616, “Yet, if I still add the restriction at first in the use of spirits, and at length the final abandonment of this false and pernicious stimulus, I have little doubt that I thus cast off one of the causes, which, if it may not absolutely generate scurvy, materially assists others in the production of that disease.”*

The writer of a publication of great weight, after narrating the results of a number of attempts to winter in the Arctic Regions, observes:—“The three principal circumstances which distinguish the *fatal* attempts from those which succeeded, are, that in the former instances, the men fed on salt provisions, *drank spirituous liquors*, and lived in indolence; whereas the men who survived the winter, and were but slightly affected by, or altogether escaped

* Memoirs of the Manchester Literary and Philosophical Society, vol. i.

† Parliamentary Evidence, pp. 488, &c

* Sir John Ross's Arctic Expedition.

the scurvy, fed upon fresh animal food, or at least preserved without salt; *they drank water only*, and used much exercise. On the value of fresh meat and exercise as preventives of disease, it is unnecessary to comment. With respect to the use of spirituous liquors, the preceding facts are extremely important and satisfactory. These pernicious liquors, indeed, are now generally understood to be prejudicial, during severe and continued cold, although they may afford some support against the temporary effects of cold and moisture. The brief elevation of spirits which they produce is a very fallacious token of their good effects, as it is always succeeded by the greater depression, and therefore tends rather to exhaust than to invigorate the principle of vitality."*

The Rev. Richard Knill, Missionary at St. Petersburg, states, that the Russians have found by experience, that ardent spirits are exceedingly injurious to soldiers, when exposed to severe cold. When a regiment is about to march in the winter season, orders are invariably given, that on the previous day no soldier shall be allowed to take the smallest quantity of spirits. Mr. Knill further states, that during the war with Poland, he saw a regiment assembled in the morning, and before marching, the corporal smelt the breath of each man; and the few who had taken spirits were directly turned out of the ranks, as the cold would most certainly prove fatal to them.

"In 1619, the crew of a Danish ship of sixty men, well supplied with provision and ardent spirit, attempted to pass the winter at Hudson's Bay, but fifty-eight of them died before the spring, while in the case of an English crew of twenty-two men, in the same circumstances, but destitute of distilled spirit, only two died. In another instance, of eight English men, also without spirituous liquors, who wintered in the same bay, the whole survived, and returned to England; and four Russians left without ardent spirits or provisions, in Spitsbergen, lived for a period of six years, and were also at length restored to their country. In the winter of 1796, a vessel was wrecked on an island off the coast of Massachusetts; there were seven persons on board; it was night, five of them resolved to quit the wreck, and seek shelter on shore. To prepare for the attempt, four of them drank freely of spirits, the fifth would drink none. They all leaped into the water, one was drowned before he reached the shore; the other four came to land, and, in a deep snow and piercing cold, directed their course to a distant light. All that drank spirits failed, stopped, and froze, one after another; the man that drank none reached the house, and about two years ago was still alive."†

Dr. Mitchel, in reference to facts respecting ships crews wintering in icy regions, observes:—"That in all the frequent attempts to sustain the intense cold of winter in the arctic regions, particularly in Hudson's Bay, Greenland, and Spitsbergen, those crews or companies which had been well supplied with provisions and liquors, and enabled thereby to indulge in indolence and free drinking, have generally perished; while at the same time, the greatest number of survivors have been uniformly found among those who were accidentally thrown upon the inhospitable shores; destitute of food and spirituous liquors, compelled to maintain an incessant struggle against the rigours of the climate in procuring food, and obliged to use water alone as a drink."

Numerous examples might be adduced to show that these injurious results do not, as is generally supposed, altogether arise from the *excessive* use of spirituous liquors. The following instance is convincing, and to the point: A brig from Russia, laden with iron, ran aground upon a sand bank near Newport Island, North America. The master was desirous to unload and get her off; the weather, however, was extremely cold, and none could be found to undertake the task, as the vessel was at a distance from the shore, covered with ice, and exposed to the full effect of the wind and cold. An individual, a packet master of Newport, who abstained from the use of spirituous liquors, at length engaged to unload the brig, and procure his men to do the work. Six men were employed in the hold, which (the vessel being bilged,) was full of water. They began the work with the free, but temperate use, of ardent spirit, supposing they would need it then, if ever. But after two hours' labour, they all gave out, chilled through. After having refreshed and warmed themselves, they proceeded to make a second attempt, but at this time used *either* only during the day. After this experiment, they succeeded better, but still suffered much from the effects of cold. On the second day, the men consented to follow the directions of their employer, and drank nothing but milk porridge, made rich, and taken as hot as the stomach would bear it. Although the weather was equally as severe as before, they were, after this change in their diet, enabled to continue their work from four to seven hours at a time, and then came up from it not at all chilled. With this simple beverage handed round every half-hour, they continued their work from day to day, with not one drop of intoxicating liquor, until the iron was all handed out, and brought on shore. Not one of them had a finger frozen.

A sea-captain of Boston, Massachusetts, informed Dr. Messey, that on a memorable cold Friday, in the year 1816, he was on the homeward passage off the American coast not far from the latitude of Boston.

* Rees' Encyclopædia, article "Cold."

† Laid by a Medical Practitioner, Glasgow.

Much ice made upon the ship, and every person on board was more or less frozen' with the exception of two individuals, who were the only two on board the vessel that drank no spirit.

"The brig *Globe*, Captain Moore," states the anniversary Report of the Pennsylvania Temperance Society for 1831, "has lately returned from a voyage to the Pacific Ocean. She had on board a crew of ten persons, and was absent nearly eighteen months. She was, during the voyage, in nearly all the climates of the world; had not one person sick on board, and brought the crew all back orderly and obedient. All these advantages Captain Moore attributes, in a great measure, to the absence of spirituous liquors. *There was not one drop used in all that time: indeed, there was none on board the vessel.*"

The following extract is made from a statement in the *European Magazine*, and *London Review* for November, 1811.— "Having passed the greater part of fourteen winters in the district of Maine, in the latitude of 44° north, where Fahrenheit's thermometer has been known 36° below Zero, and where a person engaged in any active pursuit, must frequently, in the course of every winter, be exposed to cold, greater than 20° below Zero. Under such circumstances, all prudent people abstain from the use of ardent spirits, and make great use of coffee, it being the general custom in travelling (which is almost always in open sledges,) to have coffee as a beverage for dinner, instead of any other; and the effect I have always heard attributed to it, and which it certainly had on myself, is, to produce a general glow over the whole surface of the body, which lasts for a considerable time; while the effect of spirituous liquors, under the same temperature, only produces a sensation of heat in the mouth, throat, and stomach; which, by destroying the equilibrium of the system, renders the effect of cold much more sensible on the extremities. That this is the effect of spirituous liquors, too many fatal instances can be adduced; one of which fell under my own observation, and in which I was concerned as a witness.

"Twenty-five persons volunteered their services to cut a vessel out of the ice, in an exceedingly severe winter night. At daylight, only nine were able to persevere in the attempt; and, on enquiry, it appeared that none of these had tasted spirits. All the rest had, in a greater or less degree, made use of them; and had there not been inhabited buildings near where they were employed, several must have perished. Those who had abstained, took a breakfast of strong hot coffee, and with that meal only completed a severe exertion of twenty-four hours, wet the whole time, and exposed to a degree of cold much below Zero."

The next extract is made from the account

of the wreck of the *Medusa*, published in 1816. "They (the only four men who were left on the wreck) lived in separate corners of the vessel, which they never quitted but to procure food; and this consisted only of tallow and a little bacon. If, on these occasions, they accidentally met, they used to run at each other with drawn knives, so completely had selfishness and ferocity stifled that sympathy which fellow sufferers are generally disposed to feel to each other. It is a remarkable fact, that as long as these men abstained from strong liquor, they were able to support the hardships of their situation in a surprising manner; but when they began to drink brandy, their strength daily and rapidly diminished."

It is well known that in the disastrous retreat of Napoleon's army, during the Russian campaign, scarcely one of those escaped death who indulged in ardent spirits. Count de Quirkville, of Normandy, one of the few officers of the royal legion, who survived that expedition, states, that he attributes his fortunate escape, in a great measure, to his never having drunk any *spirits* during the retreat, but only *water*.* Fortunate, indeed, would it have been for thousands, who fell victims to that melancholy expedition, had they pursued the same plan.

Barron Larrey informs us that during this memorable retreat, the Germans, Dutch, and other soldiers from the North, who indulged in the use of ardent spirits, sunk under the effects of cold almost in battalions, while their more temperate associates from the South, who continued their accustomed abstemious habits, almost altogether escaped the fate of their less prudent comrades.

Dr. Cheyne, whose medical skill and accuracy as a writer, renders it the more valuable, relates the following fact:—"Many years ago, in the county of Galway, two extensive graziers met at dinner, when, upon a discussion taking place between them, respecting the best method of enabling their herdsmen to endure the cold, watching, and fatigue, to which they were exposed in driving cattle to Ballinasloe, it was resolved upon by one of the graziers that he would supply his herdsmen with abundance of good and wholesome food, but give them only water to drink: while the other determined he would give his men an abundant supply of whiskey. Accordingly, the two sorts of herdsmen set off, at the same time, to the October fair at Ballinasloe. They were all able-bodied young men, of similar habits; the journey which they had to perform was of the same length, the fatigue the same; the weather was wet and inclement; they were all drenched with wet, and obliged to sit up all the night in their soaked garments. On carefully contrasting the water-drinkers with the whiskey-drinkers, the result was

* Scottish Temperance Record, vol. ii. p. 154.

decidedly in favour of the former, who were in full vigour, had never quitted their posts, and bore up well to the last; while the others were so completely exhausted, that during part of the time at the fair they were useless, and on their return home were scarcely able to drag one leg after the other."

The same results have been found to attend similar experiments in our own country. Coachelmen, who travel both by day and night, during the most severe frosts of winter, are enabled the better to withstand the effects of cold, by entirely abstaining from all kinds of alcoholic stimulants, and partaking only of tea, coffee, or simple water. Several instances of this kind, are, at the present period, to be found in Lancashire, and, indeed, in many parts of the United Kingdom. These individuals unanimously add their testimony to the safety and benefit of the practice. During the very severe frost which happened about the commencement of the present century, the hackney coachmen of London suffered exceedingly from the practice of indulging in the use of ardent spirits; many, indeed, died, in consequence of dram-drinking. Those, however, who resorted to the use of tea, which was done in a few cases, not only weathered the cold, but acquired health and activity from their regimen.*

The Rev. Dr. Molesworth, vicar of Rochdale, in his interesting popular periodical, the "Penny Sunday Reader," tells us that on one occasion he, when travelling, happened to be on the coach-box, and observed the manly, independent, quiet, and sensible bearing of the coachman—a man apparently between thirty and forty years of age. He was struck with the exact punctuality with which he kept his time at each stage—not a minute before or after. Dr. Molesworth also noticed, that with steady driving they passed several other coaches, while their drivers were in at the road-side public-houses, and that his coachman never drank anywhere, or lost a moment, which he might be compelled to make up by unduly urging his master's cattle. On a request being made, the man, in a perfectly unaffected and artless manner, gave the following account of himself:—

"I drive every day (Sundays *not* excepted) ninety-four miles, and have not been off the road for one single day, either from pleasure or sickness, for three years. Next Sunday I am to have my first rest during that period. *I never drink any spirits or malt liquor*; neither do I eat animal food more than once a day. I never take eggs for breakfast, nor do I eat or drink any thing between my three meals, viz., breakfast, consisting of tea and bread and butter; dinner, at which I take, usually, a very little toast and water, and

occasionally, but very rarely, a sixpenny glass of white wine and water; supper, consisting of tea or gruel, and bread and butter. *I suppose there is not a man in England can enjoy better health than I do.* I am always cheerful. *I never found myself so strong as since I adopted this course*, nor so comfortable in all respects. I commenced it on my marriage, above eight years ago, and have never had cause to repent. I had, before that time, been accustomed to live rather freely. I calculated that I spent, on the average (and believe that a great proportion of guards and coachmen do the same, and many spend more,) *three shillings* a day for drink. Since I have adopted my present plan, I have a box in my bed-room, of which I consider the contents to be *devoted to my children*, as their money. Into this, every night I drop three shillings, always saying, '*Three glasses of brandy and water.*' The amount of three glasses of brandy and water, at the year's end, I find to be exactly *fifty-four pounds fifteen shillings*. I live in an exceedingly comfortable house. I have the happiest home that ever blessed man, and my wife and children always know, when I return home from my journey, who is coming; I come home always the same, not one night sober, another stupified and cross, and another noisy and drunken. I always rise to a moment with ease, without being called, at six in the morning. I mind my business, and I find that the way I live is both pleasant and advantageous. My wife and family like it, my employers like it, the public like it, and I like it myself. It has kept me in health of body, peace of mind, and continual cheerfulness and content."

A few days after this, Dr. Molesworth, in conversation, was told the following anecdote:—

"You know, Sir, the driver of the four-horse baggage-van?" We replied that we had oftentimes observed him, heard that he was a very steady trustworthy man, and that many wondered at his being so strong at his age, and his being able to carry on his occupation. "Well, Sir," continued he, "I used to water that man's horses *fifty years ago*, and all the coachmen and guards used to joke and jeer at him, because he would not drink any spirits. They nicknamed him *Teakettle Tom*! They used to set up a laugh over the drink, and call out to him, '*Here comes Teakettle Tom!*' But they are all dead; and here he is alive and well, and at his time of life able to drive and do more work than many young coachmen; and whenever he chooses to go home and rest, he has got a comfortable house of his own, and enough to keep it warm."

A most striking corroboration of these statements is afforded by James Hogg, the Ettrick shepherd, in relation to the sufferings which the shepherds of the Highlands and other parts of Scotland experience,

* Inquiries into the Effects of Fermented Liquors, by Basil Montague, 2nd Edition, 1818.

during the prevalence of severe *snow storms*. He thus remarks:—"It was a received opinion all over the country, that sundry lives were lost, and a great many more endangered, by the administering of ardent spirits to the sufferers, *while in a state of exhaustion*. It was a practice against which I entered my vehement protest. A little bread and sweet milk, or even a little bread and cold water, proved a much safer restorative in the fields. Some who took a glass of spirits that night, never spoke another word, even though they were continuing to walk and converse when their friends found them. On the other hand, there was one woman who left her children and followed her husband's dog, who brought her to his master, lying in a state of insensibility. He had fallen down bareheaded among the snow, and was all covered over, save one corner of his plaid. She had nothing better to take with her when she set out, than a bottle of sweet milk, and a little oatmeal cake, and yet with the help of these, she so far recruited his spirits as to get him safe home, though not without long and active perseverance. She took two little vials with her, and in these she heated the milk in her bosom. That man would not, in future, be disposed to laugh at the silliness of the fair sex."

These illustrations, it is presumed, are sufficiently powerful, to demonstrate the injurious nature of alcoholic stimulants, when administered to prevent the effects of severe cold, either as a precautionary preservative, or as a means of restoring the system from physical exhaustion. On the contrary, it is seen, that they diminish and destroy that vital power which nature, with astonishing care, nurses up for extraordinary emergencies. The most powerful preserving influence from cold is best attained by the moderate use of suitable and nutritious food. The natural powers of the system are thus efficiently aided, and there are few physical trials, even of an unusually depressing description, which man is not thereby enabled to encounter and overcome.

III. *The practice of indulging in the use of intoxicating liquors in hot climates, and during extreme heat, from whatever circumstance it may arise, has been productive of very injurious consequences.* No more decisive evidence can be found of this fact, than the experience of those, who have resided for a considerable length of time in the East or West Indies, and other similar climates. In warm latitudes, those persons who refrain from the use of intoxicating liquors, and are content with the use of pure water, and similar simple diluents, are not only much more free from disease, but are enabled thereby to resist, to a greater extent, the enervating influence of excessive heat.

"It is absurd," remarks Dr. Rush, "to suppose that spirituous liquors lessen the effects of heat upon the body. So far from

it, they rather increase them. They add an internal fire to the external heat of the sun; they dispose the system to fevers and inflammations of the most dangerous kind; they produce preternatural sweats which weaken the frame, instead of an uniform and gentle perspiration which exhilarates the body. Half the diseases which are said to be produced by warm weather, I am persuaded are produced by the spirits which are swallowed to lessen its effects upon the system."*

"Rum," remarks Dr. Bell, "whether used *habitually, moderately*, or in *excessive quantities*, in the West Indies, always diminishes the strength of the body, and renders men more susceptible of disease, and unfit for any service in which vigour or activity is required."

Dr. Mosely, in his work on Tropical diseases, thus remarks:—"I aver, from my own knowledge and custom, as well as the custom and observation of many other people, that those who drink nothing but water, or make it their principal drink, are but little affected by the climate, and can undergo the greatest fatigue without inconvenience, and are never subject to troublesome or dangerous diseases."

Henry Marshall, Esq., Deputy Inspector General of Army Hospitals, a writer of distinguished merit, who, it appears from his own statement, was subjected to great exertion as well as heat in a tropical climate, observes, "So far from being calculated to assist the human body in enduring fatigue, I have myself marched on foot with troops in actual service, in a tropical climate whose mean temperature is considerably higher than that of Jamaica, without any other beverage than water, and occasionally a cup of coffee, I have always found that the strongest liquors were the most enervating, and this, in whatever quantity they were consumed: for the daily use of spirits is an evil habit, which retains its pernicious character through all its gradations; indulged in at all, it can produce nothing better than a diluted or mitigated degree of mischief."

Sir James M'Gregor adds the following important testimony, in an account which he gives of the march of a division of the British army in Egypt, which was sent from Hindostan, to co-operate with the main army in opposing the French, under Napoleon:—"After crossing the great desert, in July, 1801, from a difficulty in procuring carriage, no ardent spirit was issued to the troops in Upper Egypt. At this time, there was much duty of fatigue, which, for want of followers, was done by the soldiers themselves. The other duties were severe upon them; they were frequently exercised, and much in the sun; the heat was excessive: in the soldiers' tents, in the middle of the

* Enquiry into the effects of Spirituous Liquors, &c.

day, the mercury in the thermometer of Farenheit, stood at from 114° to 118°, but at no time was the Indian army in so healthy a state."

Dr. Corbyn states, that he resided twenty years in India, eleven of which he had passed under canvass, and, in consequence, is acquainted with the difference which exists between European and Sepoy regiments. The Sepoys worked night and day, and, *at this period drank only water*. The Europeans, on the contrary, indulged freely in intoxicating liquors. As a proof, however, that they can do much better without them, Dr. Corbyn alludes to the custom of kegging in India, that is, the men make vows that they will not drink for a year together. *During this time they are remarked as being the finest men in the regiment*.

Dr. James Johnson, who, from his extensive experience as a physician, and from his residence in the East Indies, is well qualified to express an opinion on this subject, remarks:—"The grand secret, or fundamental rule, for preserving health in hot countries, is, *'to keep the body cool.'*" "I have," he further remarks, "alluded to the strong sympathy that subsists between the skin and several internal organs, as the stomach, liver, and bowels; on this principle, common sense alone would point out the propriety of avoiding heating and stimulating drink, for the same reason that we endeavour to guard against the high temperature of the climate. In short," remarks this distinguished writer, "the nearer we approach to a *perfectly aqueous* regimen in drink, during the first year, at least of our residence in a hot climate, so much the better chance have we of avoiding sickness, and the more slowly and gradually we deviate from this afterwards, so much the more retentive will we be of that invaluable blessing—health."

"The delusion which has led to the use of vinous and spirituous potations in hot climates, is kept up chiefly by this circumstance, that their bad effects are, in reality, not so conspicuous as one would expect: they rather predispose to, and aggravate the various causes of disease resulting from climate, than produce direct indisposition themselves; consequently superficial observation places their effects to the account of other agents."

"Too often," says Dr. Madden, "to banish care, the bottle is had recourse to, as if vigour was to be found in a stimulus which is succeeded by exhaustion. All the English artizans, who first entered the service of Mohammed Ali, have fallen victims to the climate, or rather to their intemperance. Travellers may not carry intemperance to this extent, but they generally wish to live as they did at home, to eat the same quantity of food, and to drink the same quantity of wine; but they must learn that what is moderation in a cold climate, is in-

temperance in a hot one.—The natives of India suffer not from diseased liver. The Egyptians are seldom attacked with the bilious and other fevers prevalent among the Franks. In fact, the diseases from which we suffer in the East, are attributable in most cases to our own excesses. In all warm climates the digestion of strangers becomes more or less impaired, the tone of the stomach, as well as of the whole system is relaxed. It is in vain to seek to invigorate by stimulants, or to restore strength by the most nutritious diet: the digestion is now unequal to it and the quantity of animal food should be considerably decreased."*

A recent traveller, whose writings are well known to the public, thus remarks in favour of temperance:—"I eat moderately, and never drink wine, spirits, or fermented liquors in any climate. This abstemiousness has ever proved a faithful friend; it carried me triumphant through the epidemic at Malaga, where death made such havoc about the beginning of the present century; and it has since befriended me in many a fit of sickness, brought on by exposure to the noonday sun, to the dew of the night, to the pelting showers, and unwholesome food."†

An illustration similar in its character is found in Keppel's Travels:—"Though amply provided with spirits and all professing allegiance to the bottle, we tried to content ourselves with water, an experiment which we found to answer so well, that while actually on the road, we entirely abstained from drinking any thing else. To this circumstance we alone attribute our health, during our long and fatiguing journey."‡

The testimony of Mr. Hoskins is equally conclusive. "Well supplied," he remarks, "with rice, good biscuit, and meat, the traveller may live tolerably well, even in the deserts. Since I left Thebes, four months and a half ago, I have passed two deserts of eight days journey each, and many small ones, and have generally been in a miserable country, yet I have only been one day without fresh meat, and that by accident. To court privations is as great folly as to fear them when they arrive, and not to submit to them cheerfully when requisite. *I am certain that wine and spirituous liquors are injurious in this climate*. During the whole of this journey *water* has been my only beverage; and, on the whole, I have enjoyed very tolerable health, considering the excessive heat, and the many annoyances and delays, still more injurious in this climate than the fatiguing pace of the camel."||

Dr. Jackson, who travelled 118 miles in

* Travels in Turkey, Egypt, Nubia, and Palestine, in 1824-5-6-7, by R. D. Madden, M.D., vol. i. p. 272. Ed. 1833.

† Waterton's Wanderings in South America, p. 159. Ed. 1836.

‡ Voyage up the Tigris from Bussorah to Bagdad, in 1820.

|| Hoskin's Travels in Ethiopia, Meroe, &c., 1835. p. 281.

Jamaica in four days, and carried at the same time baggage equal in weight to the common knapsack of a soldier, says :—" In the journey which I have just now mentioned, I probably owe my escape from sickness to temperance and spare diet. I breakfasted on tea about ten in the morning, and made a meal on bread and sallad after I had taken up my lodging for the night. If I had occasion to drink through the day, water or lemonade was my beverage," and again, in conclusion, " I have introduced my own experience on the present occasion, because it enables me to speak from conviction, that an English soldier may be rendered capable of going through the severest military service in the West Indies, and that temperance will be one of the best means of enabling him to perform his duty with safety and effect."

Dr. Magrath, of Jamaica, attributes " a great deal of the mortality that occurs in that country to the intemperate use of fermented liquors." His notions of intemperance are as follows :—" If after taking stimulants, (no matter how small the quantity,) the person feels heated and restless, unless some other very evident cause can be assigned, he may be assured he has committed an excess, and should accordingly take warning." Again, says this physician, " The generality of the people would do better by abstaining altogether from spirit, wine, and malt liquors." In reference to the popular prejudice against water in those climates, Dr. Magrath utters the following sensible remarks :—" Most persons on their arrival in the country are told, and believe, that *pure* water is a deadly poison, and that it is absolutely necessary to qualify it with a little spirits ; this they do at first with reluctance, but the thirst being excited rather than allayed by it, they are soon reconciled by use to the mixture, and in a short time numbers become regular grog-drinkers. That a copious draught of *cold* water may produce injurious effects if taken by a person exhausted by fatigue is well known, but unfortunately it is seldom to be procured even sufficiently cool, and during the twenty years that I have been in the Island, I have never known a single instance in which it caused mischief or even inconvenience."*

Dr. W. Ferguson, Inspector General of Army Hospitals, in an article in the January Number of the United Service Journal, says, " a certain portion of the soldier's pay, called subsistence-money, (it used to be tenpence a day,) has been allotted by the country, for the express purpose of his maintenance ; but we have fed him and made him a present in former times of the whole, and now, I believe, of somewhat above half of this, *to poison himself with* ; and most faithfully as he fulfilled the condition, for he has invariably spent it in rum.

The German soldiers of the 60th, when I was in the West Indies, of their own accord, *ate*, instead of drank, their subsistence-money, and they were greatly healthier than the British. The drink of the ancient Romans, while serving in the field, was vinegar and water. On that drink their warriors conquered the world ; and, at one time, the more modern Turks were not very far from accomplishing the same on coffee and sherbet. It is a safe and good rule of health, for every one, in all climates, to observe as dry a diet as their constitution will permit ; and the custom of constant drinking, because the weather is hot, is a most dangerous one ; for the swilling, *even of cold water*, will presently become a habit, and at last a passion, from indulgence."

The above illustrations necessarily lead us to the conclusion, that intoxicating liquors, are not only *not required* in tropical climates, but are absolutely *pernicious*, and the most fruitful sources of the disease and mortality, which so generally attends the residence of Europeans in those countries. This, no doubt, arises from a want of due consideration, in regard to the change of diet required on removal to latitudes of this description ; and hence, the same freedom has been indulged in regard to food and stimulating liquors, as had been practised in an atmosphere of a much colder character. Hence, also, the rapid inroads which disease makes in tropical climates, on its unfortunate victims, and in particular, such diseases as originate in the use of intoxicating liquors. Among this class, none are of more common occurrence than diseases of the liver. It has been remarked, that diseases of the liver and visceral organs, are more frequent in occurrence, and more severe in their character, in proportion to the greater or less indulgence of mankind in the use of intoxicating liquors. For this cause, the natives of the more temperate parts of the globe, are less subject to these severe scourges of the human race.

Hence, remarks Lady Morgan, " the very trifling abuse of spirituous liquors which occurs in France, and the little intercourse which subsists between that country and the West Indies, very much exempt the inhabitants from that class of liver complaints, which are so abundant in England, and which, masked under various insidious forms, extend to a vast many different complications of disease. The same abstinence also operates to simplify fever, and to render its connexion with visceral obstructions, less common and less violent."*

A remarkable instance of the benefit derived from *abstinence* in warm climates, is related in a work recently published. " A great number of British officers, who surrendered with General Mathews, and who were taken in action with Hyder Ali and his son, were long kept in the dungeons of

* Jamaica Physical Journal.

* Morgan's France.

Seringapatam,* and it is a curious fact, that they returned to the army in perfect health; now, all they had to live upon, was a handful of rice each, every day, and a little water. It appears, that when these officers were captured, many of them laboured under liver complaints, and had also received severe wounds; yet, upon getting back to their regiments, after years of confinement in a dungeon, living all the time on rice and water, they found themselves high in rank by the death of their brethren, who had been cheering themselves with good old madeira, claret, champagne, brandy, together with all the variety of a groaning table."†

A similar instance of the beneficial consequences derived from abstinence, is related by Dr. Farre. That physician was once consulted by a master and commander of a British merchantman, who was carried into Algiers, previous to the chastisement of the Algerines by Lord Exmouth. The Dey of Algiers had him immediately stripped naked and chained to another British prisoner, and then placed on the public works, from four in the morning, until four in the afternoon; after which time, he was turned into a cell with his naked companion, until the recommencement of his laborious employment. By his side in the cell was placed a pitcher of water, and a loaf of black bread. Dr. Farre inquired of him, whether he could eat it; "Oh, yes; it was very sweet, indeed." What did it consist of? "It was made of the black wheat of Africa, and the vegetable locust; but it was appetite gave it sweetness." Now, says Dr. Farre, it is remarkable, that this man was a prisoner for nine months, while he was fed on one pound of bread and a pitcher of water per diem, and had to perform hard work under such a tyrant, and to my question, did you enjoy health? "Perfect health, I had not a day's illness. I was as lean as I could be, but I was perfectly well." When he was set at liberty, concludes Dr. Farre, and he returned to British fare, then he had to consult me as a physician.‡

"Dr. Berwick, tells us, in the Life of his Brother, who, in the civil wars, had for many years been confined in a low room in the Tower, during the usurpation; that at the time of his going in, he was under a pthisis atrophy, and dyscacy, and lived on bread and water only, several years there; and yet came out at the restoration, sleek, plump, and gay."||

The notion that stimulating liquors are necessary to support the body under *great fatigue*, in hot weather, is very generally entertained in our own country. In this description may be included the harvest labour, in which so many thousands

are annually engaged for a considerable period. Some recent experiments, however, on a large scale, completely demonstrate the fallacy of this delusion. Great numbers of men labour during the heat of harvest days, assuaging their thirst with nothing stronger than water, and unanimously testify to the superiority of the practice. Dr. Beddoes long ago exposed this delusion, in an interesting pamphlet, which he published on the subject. He remarks, that "the opinion of those who have never endured the labour of the harvest, without indulging freely in the use of intoxicating liquors, and, who consequently, know little or nothing of the sober side of the question, cannot reasonably be considered as of much value." "The cooler sorts of liquor must," he remarks, "undoubtedly be tried, before it can be determined which of the two is the most suitable to the case; and I trust I shall go far towards convincing every thinking reader, and it may stagger the most obstinate, if I show *that the hardest out of doors summer work, is in some places perfectly well borne without a single drop of strong fermented liquor*; and, in others, but very little:"—and also proceeds to state, that he will establish another "most important point, namely, that in situations like that of our harvest men, and even more trying, *a cool regimen* is not only the *best*, but the only *proper*" one. After commenting on the large quantities of drink used by this class of men, Dr. Beddoes goes on to say, "That the drink of one day, exhausts probably more than the sober exertions of three; though without such a help, a hot sun, and a long day's hard labour, are sure to produce fever enough. This fever should never be fermented by such things as drive on the heart to beat with fresh fury, though, in so doing, they may give the spirits a momentary excitement; *it ought, on the contrary, to be kept down by thin diluting drinks.*" "In some of the hotter countries of Europe, where, by our Gloucestershire rule, they ought not to touch anything weaker than gin itself; they do well, notwithstanding, on vinegar and water, for harvest drink." "Before Somersetshire became a great apple country, persons who must know and cannot design to mislead, assure me, that a pint of ale a day, was the harvest allowance for a man. This pint was taken sip by sip, perhaps not above a wine glass at a time. Accordingly, it is attested to me, that in those days, Somersetshire labourers did not in the morning, turn out pale and shaking like ghosts, at the crowing of the cock, as they now do, and were not liable to the harvest surfeit. What they took to assuage thirst, beside their pint of ale, was simple water."

Doctor Beddoes then gives it as his decided opinion, that strong drinks "are not in the smallest quantity necessary for giving support, under the severest exertion, whether in the fields, or in the workshop;"

* Chittledroog.

† "Forty Years in the World," by the Author of Sketches in India.

‡ Parliamentary Evidence, p. 140.

|| Dr. Cheyne's Method of Cure in the Diseases of the Body and the Mind, p. 211.

and as a proof of the latter, furnishes us with an interesting trial made by some men, employed in one of the great iron works at Woolwich:—"A single individual prevailed upon his companions, to make the experiment of milk, as a substitute for porter. The result has proved it to be the best means of quenching the violence of thirst, and securing them from the feverish heat produced by the immoderate use of fermented liquors. They have persevered in this simple and wholesome beverage, with an evident benefit to their health, and with an increased ability of exertion." The above fact is related on the authority of Mr. Curwin, of Cumberland, an eminent agricultural writer of that day, who gives another instance at Workington, the place of his residence, in which milk had been introduced in the place of beer, with the happiest results. "They have given up small-beer in its favour; and there has been a great diminution in the quantities made at the breweries."*

"The hardest work which falls to the lot of man," remarks Mr. Jesse, in his *Gleanings of Natural History*, "is that done at the iron foundries," and yet, "so well do the labourers in this department know that they cannot perform it if they drink even beer, that their sole beverage during all the hours of this hot and heavy labour is water."

Some equally strong facts are adduced by Dr. Cheyne, of Dublin. "I had once," remarks that physician, "the opportunity of inquiring into the habits of the workmen of a large glass factory; they generally wrought for twenty-four or thirty-six hours at a time, according as the furnace continued in a proper state, and I found, during this time, which was technically called a journey, that to supply the waste caused by perspiration, they drank a large quantity of water, in the quality of which, they were very curious: it was the purest and softest water in the district, and was brought from a distance of three miles. There were three men out of more than one hundred, who drank nothing but water, the rest drank porter or ardent spirits; the three water-drinkers appeared to be of their proper age, while the rest, with scarcely an exception, seemed ten or twelve years older than they proved to be."†

A friend of Dr. Cheyne's, in a letter addressed to that physician, adds the following corroborative testimony:—"Many years ago, I was told by the men who attended the furnaces at the iron works at Merthyr Tydvil, in Glamorganshire, that they drank only water, while engaged in their work at the furnaces, the intense heat of which produced violent perspiration. Their health

was generally good, as they said, but the wages being high, they soon retired from labour, and then grew very fat, as might have been expected."* The same plan is pursued at Bedlington iron works, near Newcastle. No spirituous or malt liquor is ever allowed to the men at their work. Water is their sole beverage, even while exposed to the most severe heat. The result is equally decisive.

Dr. Mussey, President of the New Hampshire Medical Society, received the following information from a commercial friend in Massachusetts. "I visited," says he, "four or five years since, in New Jersey, an iron foundry belonging to Mr. Wood, of Philadelphia. I think there were thirty or forty men employed in the establishment, and all they drank was pure spring water. I saw them often while lading out the hot metal, and sweating at every pore, take a mug, run to the spring, and drink very freely of the water. I enquired if they did not feel any ill effects from drinking so much cold water. They answered, No. The furnace went into blast in April, and continued till October. All those employed had the best of health during the whole season, and returned to their friends in the autumn with better health and fuller purses than they ever had before."

Mr. Buckingham relates an anecdote of Dr. Beddoes, which corroborates the above statements. On enquiry, Dr. Beddoes ascertained that the hardest working men were those employed in forging ship anchors, at Portsmouth. They were at the same time exposed to great alternations of heat and cold, and were in a constant state of excitement and perspiration. Their employers allowed them an unlimited supply of strong beer. Dr. Beddoes proposed to the men that six of them should drink only water for one week, and that six others should continue their usual allowance of beer. The men, amazed at this proposition, exclaimed, "Why you want to kill us! Do you for a moment suppose it possible that we can endure such fatigue—that we can weld a ship's anchor, and drink only water? You must surely intend to kill us." "No;" said the doctor, "I have no such wish or intention. I am a physician, and shall be careful to watch the progress, so that no injury shall ensue to you. I will put down £50. Try water for one week, if you succeed the £50 is yours; if not, I shall put it back into my pocket." The men agreed to make the experiment. The two sets of men were pretty much alike during the first day of the trial, the second day the water drinkers complained less of fatigue than the others; the third day the difference was more apparent in favour of the water drinkers; the fourth and fifth

* Good advice for the Husbandmen in Harvest, and for all those who labour in Hot-berths, &c., by Dr. Beddoes, Bristol, 1808.

† Letter on the Effects of Wine and Spirits, p. 5.

* Ibid, Appendix.

day it became increasingly so; and on Saturday night the water drinkers declared that they never felt so fresh in all their lives as they had felt through that particular week.

IV. The common practice of taking alcoholic stimulants while labouring under the effects of a severe cold, is attended with most injurious, and not unfrequently even fatal, results. A cold simply consists in a preternatural excitement of the circulation, terminating in local inflammation of the mucous membrane of the nostrils and air pipes. To use spirituous liquors in such a state of the system, is but to add fuel to the already active fire. It is evident that the only safe and effectual mode of cure, must consist in such remedial agents as will diminish and not increase the excitement of the circulation. Dr. Garnett with great truth remarks as follows:—"Perhaps there would be scarcely such a thing as a bad cold if people when they found it coming on, were to keep cool, and avoid wine and strong liquors, and confine themselves for a short time to a simple diet of vegetable food, drinking only toast and water. Instances are by no means uncommon, where a heat of the nostrils, difficulty of breathing, a short tickling cough, and other symptoms, threatening a violent cold, have gone off entirely in consequence of this plan being pursued."*

Strong impressions exist in regard to the necessity of spirituous liquors, while working in damp situations and in wet weather. The incorrectness of this opinion is well illustrated by the following example:—In America, one hundred workmen were employed during a considerable portion of the day, for a number of successive days, in building a dam across a river. They were most of the time frequently up to the middle in water. During the whole of this period, they refrained from the use of ardent spirits, and coffee and other warm drinks were given to them instead. At the expiration of their labour, the workmen were so delighted with the result of the experiment, as to march in a body, with their foreman at their head, and forthwith join the Temperance Society.

The Limerick Chronicle, for 1837, contains the following equally decisive illustration:—"From the long continuance of wet weather, a field of mangel-wurzel, at Corbally, county Limerick, the property of John Abell, was overflowed. Twenty persons, of both sexes, were employed to get out the crop; and as the preservation of their health, from the effect of working in the water, and under almost continued heavy rain, required some stimulant, he had them supplied with half a pint of hot strong coffee, three times per day. Although they were

nearly a week thus employed, he had the satisfaction to find that their health had not suffered in the slightest degree."

An additional illustration is found in the narrative of Daniel Wheeler, in his account of a voyage in the ship *Francis Freeling*, during the year 1833, for Hobart Town. The ship, in its passage, touched at Rio de Janeiro, and the voyage was laborious, stormy, and dangerous to a remarkable degree. Mr. Wheeler states, in reference to the ships' company, "With a little exception our sailors have exceeded my most sanguine expectations, as to behaviour and conduct in general; but I think no men could have suffered more hardships from the weather than they have endured. For a time we gave them some wine; but whether from its becoming flat and vapid, by washing about in the cask when a quantity of it had been taken out, or with the change from cold to heat, and then to cold again, some of them declined drinking it, on account of its not suiting them, so that they had nothing but water for months together." It is a little remarkable that although they have been sometimes wet, and in wet clothes, not for a day or two, but for a week together, when their teeth chattered with cold, with no warm food, the sea having put the fires out even below the deck, and the water filtering through the deck on their beds below, and not a dry garment to change, yet not a single instance of the cramp has occurred amongst them, nor the slightest appearance of the scurvy, even in those who have before time been afflicted with it, and still bear the marks about them; and with the solitary instance of one man, who was forced to quit the deck for two hours during his watch, from being unwell, every man and boy have stood throughout the whole in a remarkable manner." And again, page 39, the same writer observes that "strangers who attended their religious meetings on board, in more than one instance remarked (as if of rare occurrence,) that their sailors looked more like healthy, fresh-faced farmers, than men come off a long voyage: the generality of those seen daily have a thin and worn-down appearance, particularly when they belong to ships that supply them daily with ardent spirits."

"It is a mistake," remarks Mr. Jesse in his "Gleanings of Natural History," "to think that beer is necessary for a hard working man. At the time I write, there are a set of men employed in draining, by task work, in Richmond, who are patterns of English labourers. Hard as they work from morning to night, and in all weathers, they seldom drink beer. They boil a large kettle of coffee in their little bivouacs in the park, and drink it hot at their meals. This costs them but little; but they do as hard a day's work upon it as any labourers in England, and have continued to do so for three years past, under all the disadvantages

* Lecture on the Preservation of Health, by Dr. Garnett, Ed. 1797, p. 34.

arising from wet and cold to which a drainer is subject.

The simple reason of these conclusive results is found in the fact, that the individuals in question were kept in a *state of continual activity*. By this means, such a condition of the circulation was induced as enabled the system to resist the effects of damp and cold. This, indeed, is all that is required in such cases, with the addition of suitable and nutritious beverage, the effects of which, unlike alcoholic stimulants, do not quickly disappear, and render the body more than ever susceptible of injurious impressions.

On a candid review of the preceding observations and facts, it will surely be acknowledged, that the "strong drink delusion" has been one of the most fallacious, as well as deep-rooted and fatal, that ever took possession of the human mind.

The consistency also of the facts detailed, with the physiological constitution of man, cannot escape the notice of the most superficial observer. From the circumstances of the case, indeed, it would appear, that mankind have been too little inclined to give the Great Author of our being credit for providing against the contingencies to which he has made his creatures liable. The subject has, however, in every age been submitted to the test of severe examination, and innumerable experiments—the unvarying result of which leads us to the inevitable conclusion,—that *intoxicating liquors are, of all other expedients, the least calculated to preserve mankind from those depressing and injurious influences of circumstances and events, to which most human beings in the course of their existence are, more or less, exposed.*

DIVISION THE THIRD.

SECTION I.

THE EFFECTS OF INTEMPERANCE ON THE MORAL AND INTELLECTUAL POWERS.

"Unhappy man, whom sorrows thus, and rage,
Two different ills, alternately engage;
Who drinks, alas! but to forget—nor sees
That melancholy, sloth, severe disease,
Memory confused, and interrupted thought,
Death's harbingers, lie latent in the draught;
And in the flowers that wreath the sparkling bowl
Fell adders hiss, and poisonous serpents roll."

PRIOR.

"The human mind is capable of being excited without the application of gross and violent stimulants; and he must have a very faint perception of its beauty and dignity who does not know this, and who does not further know, that one being is elevated above another in proportion as he possesses this capability."

WORDSWORTH.

"Nothing is so great a friend to the mind of man as abstinence; it strengthens the memory, clears the apprehension, and sharpens the judgment, and in a word, gives reason its full scope of acting; and when reason has that, it is always a diligent and faithful handmaid to conscience."

SOUTH.

- I. The dangerous effects of moderate indulgence.—II. The effects of inebriating liquors on the temper and on social intercourse.—III. The false confidence imparted by the use of strong drink, and its influence on speech.—IV. The effects of strong drink on the moral powers.—V. The effects of inebriating liquors on the intellectual faculties.—1. Mental incapacity and inaptitude to acquire knowledge.—2. Obscurity of mental perception.—3. Incorrect judgment.—4. Impaired memory.—VI. Examples of loose morality combined with intellectual acquirements.—VII. The influence of intemperance on the character of literary productions.—VIII. The effects of intemperance on personal and national independence, and on the social affections.

I. IN the next section, the injurious effects of intoxicating liquors on national character and prosperity, will be developed, and copiously illustrated. The consequences of indulgence in a national point of view, are strong and conclusive, and the proposition forces itself on our notice, *that the aggregate evil arises from individual example and influence*. All disastrous national evils have had their origin in practices, which, to the unreflective, appear unlikely to be attended with injurious effects. The progress of vice, however, is gradual and insinuating. If its approaches at first excite either alarm or distrust, evil habits soon acquire and retain an ascendancy, until the

overwhelming influence of long continued and artificial custom assumes an irresistible sway:—

The breach, though small at first, soon opening wide,
In rushes folly with a full-moon tide.

Such has invariably been the experience of mankind in all vicious practices, and such also, has ever been the original of great and ruinous national calamities.

In the present day many artificial and pernicious practices exist in society. Man is peculiarly subject to numerous and strong temptations. His intellectual and moral powers are in continual quest of variety and novelty, and, to escape danger, they require for their correct guidance frequent examination and judicious restraint. To attain this, the mind must be uninfluenced by artificial excitement. *Every thing, therefore, which has a tendency to produce improper excitement, either of mind or of body, or to inflame the passions, must be viewed as dangerous in its consequences*. Such has ever been found to be the invariable tendency of strong drink, which ought therefore to be eschewed as our greatest foe.

The purpose of this section is to examine the effects of intoxicating liquors on individual happiness and welfare, and to exhibit the baneful influence which they exercise on the intellectual and moral powers of man, as well as upon his social virtues and domestic enjoyments.

Intoxicating liquors cannot be used even in moderate portions, without injury.—The peculiarly fascinating effect of inebriating liquor has already been a subject of consideration. Its approaches are slow and insidious, often imperceptible, yet eventually potent, ensnaring, and destructive. How few are to be found of those who indulge even in the moderate use of intoxicating liquors, who are prepared to assert that they can, *at any time*, abandon the habit without some physical or mental struggle. Feelings of this nature are almost invariably found to follow the relinquishment of even moderate indulgence, and exhibit conclusive evidence of the dangerous character the habit has already begun to assume. "No man," says Dr. John James, of the United States, "is safe, who cannot without inconvenience omit for days and for weeks all kinds of intoxicating drink. No man is safe who cannot sleep without some-

thing generous before he goes to bed ; by frequent repetition a glass of wine, or a tumbler of beer, becomes dangerous. The moderate use of intoxicating liquor undermines the constitution without exciting the suspicion of the victim, until reformation is all but hopeless. No quantity of spirituous liquors, however small, can with safety be taken daily, much less several times in the day, with impunity. We should never taste vinous, or other fermented liquors, without remembering that danger lurks in every cup.”*

Parents who indulge in the habit of moderate drinking, rarely contemplate the possibility of their children becoming drunkards. Forgetful of the fact that evil habits are easily acquired, they introduce the wine bottle, and inculcate the safety and propriety of moderate indulgence. Hence their children gradually acquire a taste for stimulating liquors, and in innumerable instances, become irreclaimable drunkards.

It may be affirmed, without fear of contradiction, that *no individual, at the commencement of his career of intemperance, ever intended to become an habitual drunkard.* The moderate use, however, of intoxicating liquors, creates the habit, and hosts of “moderate drinkers” ultimately become dissipated characters. A vast variety of facts irresistibly tend to show that *there is no safety in the practice of moderate drinking.* By total abstinence alone can permanent and effectual security be attained.

“Let us bear in mind,” says Doctor Bell, “the important fact, that *drunkards were at first moderate drinkers. It is moderate drinking then that begins and keeps up drunkenness.* It is the belief that each man is a competent judge in his own case of how much alcoholic poison he can take with impunity, that leads so many to their own undoing. But, still farther, moderate drinkers are the intermediate class between those who have no love for liquor, who, if left to themselves would seldom or ever taste it, and the confirmed and grossly intemperate.”† The moderate or temperate (so called) use of inebriating liquors, forms the appetite for intemperance. The nature of such liquors renders this result almost inevitable, and woeful experience testifies the fact. *Artificial appetites constantly increase in their demands.* Natural appetite cease their demands on gratification. To this we may appropriately apply the words of our great poet :—

The precept that enjoins us *abstinence,*
Forbids us none but the *licentious joy,*
Whose fruit, though fair, tempts only to destroy.

Dr. Samuel Johnson having stated in a conversation with Dr. Boswell, that he

drank a large quantity without being materially affected by it, and that he did not leave off drinking wine because he could not bear it, adduced this reason for his abstinence—“*because it is so much better for a man to be sure that he is never to be intoxicated, never to lose the power of himself.*” The same distinguished individual, on one occasion, when at the dinner-table, was urged by Mrs. Hannah More (the company being anxious to elevate his spirits) to take a *little* wine. His reply was, “I can’t take a *little*, child, therefore I never touch it. Abstinence is as *easy* to me as *temperance* would be *difficult.*”*

II. *Intoxicating liquors induce depression of spirits and irritability of temper.*—They do not, as is generally supposed, in any degree contribute to cheerfulness of mind, or equanimity of temper. The animation produced by wine is boisterous and transitory, and does not confer either lasting strength of intellect or mental refinement. The individual, who in social intercourse is dependent on wine for mental cheerfulness, or power of conversation, is indeed a pitiable slave. Observe the conduct of such characters at their homes, where the endearing relations of domestic life ought to be found, and you discover that the fretful uneven temper of the *debauchee*, does not contribute to the sweet stores of social enjoyment. Numerous examples, within the author’s own observation, might be adduced, if necessary, by way of illustration. The remarks of a learned divine on this subject, will be found to be verified by daily experience :—“Since I have abandoned the use of all fermented drinks, I have made the discovery that I do not get angry.”

The celebrated American physician, Dr. Rush, coincides with the views just quoted. “The first effects of spirits upon the mind show themselves in the *temper.* I have constantly observed men, who are intoxicated in any degree with spirits, to be peevish and quarrelsome ; after a while they lose the moral sense,” &c.† Sir A. Carlyle, among other of “the moral effects of fermented liquors,” attributes to them “the production of a disturbed temper, fretful, unsteady, or irascible.” Perhaps nothing, remarks the same writer, contributes so much to moral equability of mind as the total abandonment of strong liquors.‡ The same author, in his work on the Diseases of Old Age, remarks, “The use of wine often induces great irritability of temper.”

The author’s personal observation has been equally decisive in regard to the uneven tempers of those who indulge even moderately in the use of intoxicating liquor. The mental and physical depression consequent

* Medical Opinions. Report of New York City Temperance Society, 1830.

† Address to the Medical Students Temperance Society of the University of Pennsylvania, 1833.

* Life of Hannah More.

† An Inquiry into the effects of Ardent Spirits, by Benjamin Rush, M.D.

‡ Lecture on Fermented Liquors, by Sir A. Carlyle.

on vinous indulgence, forms a strong predisposing cause to this inequality of disposition. These unnatural emotions, however, are seldom exhibited in the conduct of water-drinkers. "There can be no question," observes a writer of considerable eminence, "that water is the best and the only drink which nature has designed for man. The water-drinker glides tranquilly through life, without much exhilaration or depression, and escapes many diseases to which otherwise he would be subject. The wine-drinker experiences short, but vivid periods of rapture, and long intervals of gloom; he is also more subject to disease. The balance of enjoyment then turns decidedly in favour of the water-drinker, leaving out his temporal prosperity and future anticipations; *and the nearer we keep to his regimen, the happier we shall be.*"*

The observations of Dr. Trotter are forcible and correct:—"My whole experience," he affirms, "assures me that wine is no friend to vigor or activity of mind. It whirls the fancy beyond the judgment, and leaves body and soul in a state of listless indolence and sloth. The man that, on arduous occasions, is to trust to his own judgment, must preserve an equilibrium of mind, alike proof against contingencies as internal passion; even the physician requires this fortitude as much as any individual. He must be prompt in his decisions—bold in enterprize—fruitful in resources—patient under expectation—not elated with success, or depressed with disappointment. But if his spirits need a *fillip* from wine, he will never conceive or execute anything magnanimous or grand. In a survey of my whole acquaintance and friends, I find that *water-drinkers* possess the most equal temper and cheerful dispositions."

"*This*," says an authority of considerable weight, "*we believe will be confirmed by the experience of every person.*"†

Mr. Pinkerton advocates similar views: "We have been told," says that writer, "of decisive measures proposed in parliament by statesmen inflated with the fumes of wine; but as those measures must have been previously digested, they bear no resemblance to the councils and orders of generals in the field, where one instant, at any hour of the day or night, often decides the fate of a campaign or a war. || Mr. Pinkerton strengthens his remark by stating that the extraordinary man, at that time at the head of the French armies, was a model of the severest temperance, and that the other leaders imitated his example. Doubtless the Emperor Napoleon owed his unparalleled success, not only to his extraordinary

natural powers, but also to his extreme self-denial and temperance. The same fact may be observed in relation to the most distinguished warriors and statesmen, both in ancient and modern times.

Dr. James Johnson relates an instance of the superiority displayed in the temper and cheerfulness of the water drinker over those who indulge in vinous potations. Some years ago, when in a large company at Prince of Wales' Island, Dr. Johnson met with a gentleman who was remarkable for his flow of spirits and convivial talents. He attributed his animation and hilarity to the wine, which he supposed him to have taken, and expected to see them flag, as is usual, when the first effects of the stimulus had passed off. Dr. Johnson, however, was surprised to find them maintain a uniform level, after many younger heroes had bowed to the rosy god. To use his own words, he now contrived to get near to him, and entered into a conversation, when the gentleman disclosed the secret, by assuring him that he had drank nothing but water for many years in India; as a consequence, his health was excellent—his spirits were free, and his faculties were unclouded, although far advanced on Time's list; in short, he could conscientiously recommend the antediluvian beverage, as he called it, to every one that sojourned in a tropical climate.*

Of Dr. Barnes, a minister of considerable eminence and learning, in Manchester, it is said, "His temperance approached even to abstemiousness. He never tasted any fermented or spirituous liquors; yet in the hours of social enjoyment, none were more uniformly cheerful and animated than himself."†

Waller is described as one of the most celebrated wits of the day. This was no easy reputation, as his biographer observes, for a man of seventy to sustain in such society as composed the circle of that licentious court. "The vivacity of his conversation was unflagging; and while Buckingham and others indulged freely in wine, he, confining himself to water, was equal to the highest pitch of their festivity. He was the only water-drinker of that roisterous company; and Saville used to say that Ned Waller was the only man in England he would allow to sit with him without drinking."‡

Dr. Samuel Johnson thus expresses himself on the subject in question. "Wine," he remarks "gives no light, gay, ideal hilarity, but tumultuous, noisy, clamorous merriment; I admit," he further observes, "that the spirits are raised by drinking as by the common participation of any pleasure; cock-fighting or bear baiting will raise the

* Civic Life and Sedentary Habits, 1818, by Dr. James Johnson, Editor of the Medico-Chirurgical Review.

† Trotter's Essay on Drunkenness, p. 186.

‡ Ree's Encyclopedia. 1819.

|| Pinkerton's Recollections of Paris, vol. ii., p. 343.

* Tropical Hygiene, sect. Drink.

† Yates' Funeral Discourse on the death of Dr Barnes, p. 80.

‡ Bell's Poets.

spirits of a company as drinking does, though surely they will not improve conversation."*

III. *The use of intoxicating liquors is found to impart a false confidence*, by which those who indulge in it assume a disposition foreign to their natural temper. "Wine," says the illustrious individual whose opinion has just been quoted, "makes a man better pleased with himself, but the danger is, that while a man grows better pleased with himself, he may be growing less pleasing to others. Wine gives a man nothing. It neither gives him knowledge nor wit; it only animates a man, and enables him to bring out what a dread of company has repressed. A man should cultivate his mind so as to have that confidence and readiness without wine, which wine gives."

Sir Joshua Reynolds having maintained that wine improved conversation, Dr. Johnson replied, "No, Sir, before dinner men meet with great inequality of understanding, and those who are conscious of their inferiority, have the modesty not to talk; when they have drank wine, every man feels himself comfortable, and loses that modesty, and grows impudent and vociferous; but he is not improved, he is only not sensible of his defects."†

The greater the indulgence in strong drink the less power do we possess over the natural disposition.

"At the beginning of intoxication," remarks Sir A. Carlyle, "the ideas flow with a more than natural rapidity; self-love soars above our prudence, and shows itself openly; we lay aside the scale of deliberation, the slow, pondering, measuring, and comparing instruments of judgment. In this condition every man is a hero to himself; he feels as he wishes, and the state of his mind is betrayed by boastings and falsehoods, by pretensions to abilities beyond his possessions, and by a delusive contempt for the evils that beset him."‡

Addison appears to have been of this opinion, for he remarks, that not only does the vice of intemperance betray the hidden faults of a man, and show them in the most odious colours, but it often occasions faults to which he is not naturally subject. "Wine," adds this celebrated moralist, "throws a man out of himself, and infuses qualities into the mind, which she is a stranger to in her sober moments."

Hafiz, the Persian poet, characterizes wine as "the leveller of men." An Indian on one occasion, in reply to an inquiry made by a French officer, said in relation to brandy:—"It is made of *tongues and hearts*; for when I have drank of it I fear nothing, and I talk like an angel."

Milton well depicts the complacent feelings which are induced by vinous indulgence:—

"Soon as the portion works, their human count'nance
The express resemblance of the gods, is chang'd
Into some brutish form of wolf, or bear,
Or ounce, or tiger, hog, or bearded goat,
All other parts remaining as they were;
And they, so perfect is their misery,
*Not once perceive their foul disfigurement,
But boast themselves more comely than before.*"

A drunkard is an object so commonly seen in our streets in the present day, that his condition rarely excites disgust, or even remark; too often indeed this melancholy exhibition of our fallen state is made a fruitful subject of ridicule and mirth. The ancient Spartans, on the contrary, held this vice in such just abhorrence, that with a view to excite feelings of disgust in the minds of the young, they were accustomed to intoxicate their slaves, and to exhibit them to public gaze in this degraded state.

Many persons have been observed, when under the influence of wine, to discover those matters, which, while sober, they were desirous to conceal. Thus the old proverb, "*Ingrediente vino egreditur secretum.*"* As the wine goes in, so the secret goes out. This, however, must be viewed in a limited sense, and the popular phrase, "*in vino veritas*," is decidedly not universal in its application. The general effect of stimulating liquor, no doubt, is, in proportion to the amount of indulgence, to remove a man from the possession of his faculties, and, very frequently, to infuse into him such feelings as are alien to his natural disposition.

Athenæus has preserved the following verse of Ephippas:—

Οινου σε πληθος πολλ' αναχαζει λαλειν,
Ουκουν μεθυσοντας φασι τ' αληθη λεγειν.

"They who drink deep, to boundless talk incline,
And hence the proverb, "there is truth in wine."

Mr. Pinkerton, with justice, doubts the truth of this well known adage, which implies, he observes, that intoxication reveals the real character, inasmuch, as he correctly states, the effects of wine when not stupefactive are precisely those of an inflammatory fever.†

Mr. Boswell, on one occasion, in conversation with Dr. Johnson, undertook to defend convivial indulgence in wine, in the course of which he adduced the memorable maxim under consideration. "That," replied the doctor, "may be an argument for drinking, if you suppose men in general to be liars. But, Sir, I would not keep company with a fellow who lies as long as he is sober, and whom you must make drunk before you can get a word of truth out of him."

Thomson, in his *Autumn*, v. 538, in a description of rural drunkenness, well de-

* Boswell's Life of Johnson. Conversation with Sir Joshua Reynolds.

† Ibid.

‡ Sir A. Carlyle on Moral Influence of Fermented Liquors.

* Voyage de Rouvie, p. 497.

† Pinkerton's Recoll. of Paris, vol. ii. p. 345.

scribes the effects of strong drink on the speech:—

"Thus as they swim in mutual swill, the talk,
Vociferous at once from twenty tongues,
Reels fast from theme to theme."

Philips, in his poem entitled *Cyder*, b. 2, p. 143, thus speaks:—

— then twenty tongues at once,
Conspire in senseless jargon; —

Philoxenus, in *Athenæus*, uses these characteristic words, *Euppeitas oivos Παμφωνος*.

Byron made the following characteristic note of a party at which *Sheridan* was present, and where the wine as usual was freely circulated: "First silent, then talky, then argumentative, then disputatious, then unintelligible, then altogethery, then inarticulate, and then—drunk."

Solon, on one occasion, at a drinking match, was asked by *Periander* whether his silence was owing to his folly or to the want of discourse. He replied, *no fool can be silent on his cups*.

IV. *The use of intoxicating liquors is powerfully injurious to the moral faculties, and destructive of moral principles.* The position of man, as a moral agent and an accountable being, is of the highest importance. He is susceptible of the most refined and exquisite feelings, which are capable of affording him the highest enjoyment. The happiness of human beings depends in a great measure on the proper discipline of the moral feelings. Happiness is essentially progressive. The mind is ever restlessly engaged in searching out new means of occupation or sources of enjoyment. Activity is necessary to preserve the mental faculties in a healthy condition. Intoxicating liquors enervate the moral powers, and weaken the stability of virtuous resolutions, and have a direct tendency, moreover, not only to blunt the *acuteness* of the moral feelings, but to decrease their *activity*. Disregard of veracity, violation of engagements, and extinction of shame and repentance, form the leading characteristics of sensuality and intemperance. The drunkard is in general looked upon as unfit to be trusted in the several relations of life; his actions are ever viewed with suspicion and distrust. Swelling of the feet and legs, is so characteristic a mark of intemperance in America, that the merchants of Charleston cease to trust the planters as soon as they perceive it. Industry and virtue are supposed to be extinct in the man, in whom that symptom of disease has been produced by habits of intemperance.*

"Whether," remarks Sir A. Carlyle, "the dissolution of moral integrity, which so often accompanies drunkenness, be dependent upon the prevalence of undisguised selfishness, of hasty and crude judgment, or upon other changes in the moral faculties,

I shall not pretend to decide; but it appears to me, the causes exhibited are equal to the stated effects."

This writer then adduces, as one of the moral effects of Fermented Liquors, "*A dissolute carelessness about right and wrong.*"

Dr. Rush viewed this subject in a similar light. In regard to men "who are intoxicated, in any degree, with spirits," he observes, that they "violate promises and engagements without shame or remorse. From these deficiencies in veracity and integrity, they pass on to crimes of a more heinous nature, which it would be to dishonour human nature only to name."

The Parliamentary Inquiry which has been previously quoted, shows the same results under the head of "Extinction of all moral and religious principle."*

Dr. Farre observes,—"Alcohol not only disorganizes the body, but it completely demoralizes the mind, *beginning with the destruction of the love of truth*, and upon that base proceeds every vice."†

Horace informs us that the Thracians, who were free drinkers, "lost all distinction of vice or virtue."‡

The use of *strong drink brutalizes the feelings, excites the passions, and destroys the natural affections*. It thus forms the strongest inducement to the commission of every species of crime. Under its maddening influence, the passions obtain pre-eminence over reason. The vilest feelings of human nature are brought into active operation. Every successive gradation of vice removes its unhappy victim still further from his original and respectable sphere in society. Men, naturally humane in their dispositions, under the influence of intoxication, commit deeds, which in calmer moments, they view with horror and detestation. Strong drink gradually hardens the heart, and renders it callous to every humane and generous feeling. The individual who is under its influence, "fears not God, neither regards man."

Among the consequences of intemperance, as exhibited by the late Parliamentary Inquiry, are enumerated the following:

Irritation of all the worst passions of the heart; hatred, anger, revenge; with "a brutalization of disposition that breaks asunder and destroys the most endearing bonds of nature and society." Violation of chastity, insensibility to shame, and indescribable degradation; as proved by clergymen, magistrates, overseers, teachers, and others, examined by the Committee on all these points.||

Mr. Poynder, whose opportunities of observing the deleterious influence of spirituous liquors on the morals of the people

* Inq. into the Effects of Ardent Spirits, by Benj. Rush, M.D.

* Parliamentary Report, p. 4.

† Parl. Evid, p. 103.

‡ Lib. i. Carm. 18.

|| Report of Select Committee, p. 4, 534.

were great, states among their other effects, *the obduracy and hardness of the heart* which the habit induces. "With respect," he says, "to its *tendency to harden the heart, and extinguish the natural affections*, I have observed that it engenders selfishness and unkindness in the poor, to an extraordinary degree." Mr. Poynder feelingly adverts to the brutality which husbands display to their wives, the desertion of their families, the utter carelessness and neglect of their own and their relatives temporal and spiritual welfare; all of which are the natural consequences of indulgence in strong drink.*

Sir A. Carlyle, in his observations on the moral influence of strong drinks, states that "they produce insensibility, unfeelingness, and inhumanity."

"In the drunkard," says Dr. Willan, "the memory and the faculties depending on it being impaired, there takes place an indifference towards usual occupation, and accustomed society or amusements. *No interest is taken in the concerns of others—no love, no sympathy remain; even natural affection to nearest relatives is gradually extinguished, and the moral sense obliterated.* The wretched victims of a fatal poison fall at length into a state of fatuity, and die with the powers both of body and mind wholly exhausted. Some, after repeated fits of derangement, expire in a sudden and violent phrenzy; some are hurried out of the world by apoplexies; others perish by the slower process of jaundice, dropsy," &c.

The pages of ancient history present innumerable examples of this kind, the narration of which excites the keenest feelings of pity, not unmingled with disgust. Cambyses, king of Persia, delighted to witness the tortures of his fellow-creatures. On one occasion, this monarch commanded Prexaspes, a principal officer in his court, to disclose the opinions entertained of him by his subjects. "They admire, sir," said Prexaspes, "many excellent qualities which they see in you, but they are somewhat mortified at your immoderate love of wine;" "I understand you," replied the king, "That is, they pretend that wine deprives me of my reason; you shall be judge of that immediately." The tyrant then commenced drinking excessively, pouring the wine down his throat in larger quantities than he had ever done before. He afterwards commanded the son of Prexaspes, who was his chief cup-bearer, to stand upright at the end of the room, with his left hand placed upon his head. The monster then took his bow, levelled it at the youth, and declaring that he aimed at his heart, actually shot him through that vital organ. Cambyses commanded the body to be opened, and exhibiting the heart to the bereaved parent, in an exulting and scoffing manner enquired of

him, whether he had not shown great steadiness of hand?

Philopater, (Ptolemæus) Prusia, king of Bithynia, Maximinus, Sylla, and other monarchs of ancient times, present additional examples. Of Sylla, it is said, that like Marius, on his death bed, he wished to drown the stings of conscience and remorse by being in a state of perpetual intoxication.

Tiberius, (Nero) emperor of Rome, was a most immoral character, conspicuous alone for cruelty, avarice, deceit, and ingratitude. During his retreat to Capreæ, this heartless monster held out suitable inducements to such as could invent new pleasures, or produce fresh luxuries, and abandoned himself to the most hideous and loathsome vices. In consequence of his excessive intemperance, *Tiberius*, in derision, was denominated *Biberius*, while his surname of *Nero*, was with equal appropriateness changed to that of *Mero*. Of this emperor, Seneca humorously observed, that he never was intoxicated but once in his life, for he continued in a perpetual state of inebriation, from the time he gave himself up to drinking, till the last moment of his life.

Nero Claudius, another Emperor of Rome, was celebrated for his cruel and debauched habits. His burning of the city of Rome and other diabolical acts, are familiar to every reader of history. This tyrant was a most intemperate character. It was his usual custom to frequent taverns, and places of gross debauchery.

The records of modern times abound in examples, which exhibit the awful power of inebriation in the production of cruelty and crime; though the numerous instances which present themselves in common life, render any further illustration almost unnecessary.

The Orientals characteristically denominate wine as *mater malorum*, the mother of evils; an appropriate appellation, inasmuch as its use is productive of almost every species of disorder and crime. A Catholic legend informs us that the devil gave a hermit the choice of three great vices, parricide, incest, or drunkenness. The hermit recoiled with horror at the two former, and without hesitation made choice of the latter, as the least sinful. He became drunk, and in that state committed the other two.

One of our poets thus depicts the effects of strong drink on the passions:—

"He that is *drunken* may his mother kill,
Big with his sister; he hath lost the reins:
Is outlawed by himself. *All kinds of ill*
Did with his liquor, slide into his veins.

The drunkard forfeits *man*; and doth divest
All worldly right, save what he hath by beast."*

It is perhaps one of the most remarkable but instructive facts connected with this subject, that many of the most horrible deeds of cruelty and bloodshed, which form the worst features of our calendars, com-

* Examination before the House of Commons.

* HERBERT'S *Poems*.—*The Church Porch*

mitted under the influence of strong drink, are those of *individuals who in their sober state were known to be humane and kind in their dispositions.*

Bishop Burnet, who had much intercourse with Peter the Great during his memorable visit to this country, describes him as "a man of very hot temper, and soon influenced." The Czar, however, was not naturally devoid of feeling or kindness of disposition. His vehement passions were roused by the maddening influence of strong drink. "*He raises his natural heat,*" says the same distinguished prelate, "*by drinking much brandy, which he rectifies himself with great application.*" Many dark shades in Peter's character doubtless had their origin in this unfortunate habit. His biographers indeed inform us that most of the gross deeds of cruelty attributed to this monarch, were the results of those debauches in which he commonly indulged.

Mr. Poynder, tells us that Mr. Bonar's murderer, "when not under the influence of drams, was a civil and obliging man, but when he had been drinking, was fierce and violent." The papers record, so late as August 1841, a murder committed in a quarrel on a man who was at the time in a state of intoxication. "The deceased, as well as the murderer, is represented to have been addicted to drinking, and when intoxicated, to be quarrelsome, when sober, he was kind and well disposed."

Strong drink has ever been the incentive of crime and wretchedness. "I am fully persuaded," says Mr. Poynder, "that in all trials for murder which take place, with very few (if any) exceptions, it would appear on investigation that the criminal, had, in the first instance, delivered up his mind to the brutalizing effects of spirituous liquors." Many criminals, indeed, assured Mr. Poynder that it was necessary before they committed crimes of particular atrocity, that they should have recourse to drams, as a stimulus. With this knowledge they resorted to them beforehand, for no other object but that they might be enabled to harden their natures and fortify their minds; after which, says that gentleman, they found it easy to encounter any risk, and to proceed all lengths. One man in particular said to him: *Sir, I could not enter your house in the dead of the night, and take the chance of your shooting me in it, or of my being hung when I got out of it, unless I was to get well primed first.*

A man in Ireland was for some offence or other, on one occasion, beaten unmercifully by the Whitefeet, and left for dead. On the following day a magistrate visited the wounded man, to take his deposition. "Did you know any of the party?"—"No, Sir," "Were they drunk?"—"No; they were all well able to do their business." "Had they drunk anything?"—"Well, I wonder

your honour, that a gentleman of your knowledge would ask such a simple question; sure you do not think they would come without preparing themselves; I will engage they had two or three glasses of whiskey a man, whatever more they might have drank."* This simple circumstance is corroborated by universal experience.

The murderers of the three brothers, the Kaneelly's, in the county of Tipperary, intended merely to beat them, and frighten them, from the possession of a piece of land taken in opposition to the rules of a secret society. The leader of the party unfortunately gave each of them several glasses of whiskey, and maddened by the poison, nothing could satisfy them but blood.†

One of the persons implicated in the murder (by burning them alive) of the unfortunate Sheas, of Wildgoose Lodge, Tipperary, in a conversation with Counsellor Mackay, when asked how he could be induced to take part in so base and cowardly a crime, replied, "*I was made drunk; and with the aid of whiskey would not only commit such another crime, but twenty others like it.*"

Malone, the murderer of Mr. Lennard, (March 1833) when the verdict, guilty, was pronounced against him, in Kilkenny Court-house, said to the judge, "Yes, my Lord, I am guilty;" and pointing to his mother in the same dock, exclaimed, "She has been the cause of it." It appeared that the aged monster, who was upwards of eighty years old, had agreed for the price of the blood to be shed by her offspring. She watched the approach of the unfortunate gentleman, and also handed the pistol to her son, on his coming within their reach. Malone was at first startled—"How can I murder the poor gentleman," he remarked, "Take this, you cowardly rascal," said his unnatural mother, and gave him the remains of a half-pint of whiskey, obtained for the occasion. He drank the demon-poison, murdered the unsuspecting victim, and suffered the penalty of his crime.

Pegsworth, the murderer, in an examination, previous to his trial, remarked, "It has been stated that I was perfectly cool and collected and sober at the time. I declare to God, at whose bar I must shortly appear, that I was not sober; and can say to the best of my recollection, that I did not think of the horrid deed at all, until about twenty minutes before it was perpetrated."

It has already been said that strong drink destroys the natural affections. The Assistant Medical Commissioner, in his report, inserted in the appendix to the late Poor Law Inquiry (Ireland), relates the following among numerous other cases which came under his notice at the Jervies Street Hospital, Dublin. "There have been four cases of fatal stabbing, within a short

* Parliamentary Evidence, p. 230.

† Ibid.

period caused by drunken quarrels; one of these, a wife stabbing her husband (by whom she had four children) in the abdomen with a knife. The intestines protruded, and although the best medical advice was immediately procured, the wounded man died of inflammation. In another case two brothers, grown up, and nearly of the same age, after drinking six days together, finished by quarrelling; one stabbed the other in the stomach, he vomited blood, and died in two days. Besides these cases there have been others of a fatal character, from rupture of the intestines," and other causes.

The following cases are adduced to show that parents are devoid of all natural feeling when under the influence of strong drink. In March, 1837, a woman was brought to the Marylebone Police-office, whose countenance denoted that she was a confirmed dram-drinker, charged with having been caught in the act of pouring a quartern of gin down the throat of her infant, eight weeks old. The policeman stated that when his attention was called to the prisoner, she was *drunk*, and had a *quartern measure in her hand full of gin, which she was pouring deliberately down the throat of the poor baby, which was nearly strangled by the draught*. The mother was taken to the police office; the infant which was nearly black in the face, was conveyed to the work-house to be taken care of.

In the month of September in the same year, a crowd of persons were attracted in Leather lane, Holborn, by the screams and struggling of a boy, about eight years of age, who was in strong hysterics, and who attempted to precipitate himself from the window, but was fortunately prevented by a neighbour. It appeared that his father and mother *had been drinking until they were dead drunk, and they had plied their child with gin until he raved and fell into fits*. He was found to be in a dangerous state, and placed under medical care. Need we add a word in comment on these awful facts?—What events to hand down to future ages, as having occurred at a period remarkable for the extension of education and the diffusion of Christian principles.

V. The human mind has truly been designated the noblest part of man. He holds his high rank in creation as an *intelligent* and *accountable* being; and in proportion as he cultivates or neglects the development of his intellectual and moral powers, does he elevate or sink himself in the scale of rational beings. How degrading for man made in the image of his Creator, thus to prostitute his moral powers, and to enervate his intellect through the influence of inebriating liquors!

Among other effects of strong drink on the intellectual faculties, may be enumerated the following:—

1. *Mental incapacity and inaptitude to acquire knowledge.*—The use of intoxicating

liquors is forcibly described as tending to the "destruction of mental capacity and vigor, and extinction of aptitude for learning."* The mental faculties are rapidly impaired when under the paralyzing influence of strong drink, and gradually become more and more *incapable of action and less vigorous in their operations*. The once strong and active mind exhibits evidence of weakness and incapacity, and is unable to exercise its powers with its wonted energy and decision. The *desire* also for knowledge appears to decline with the incapacity to acquire it. Hence, the disinclination to studious exercises manifested by those who are in any degree intemperate in their habits.

2. *Obscurity of mental perception.*—The mind loses its accustomed distinctness of perception, and is unable to discover with accuracy and clearness the harmony or discordance of any given objects of contemplation. The beauty and order of intellectual perception, become less apparent and agreeable.

For when the wine's quick force has pierc'd the brain,
And pushed the raging heat thro' ev'ry vein,
The members all grow dull, the reason weak.—

Marmontel in his Memoirs, furnishes us with an illustration in point—"The pleasures of the table contributed to obscure my mental faculties. I never suspected that temperance was the nurse of genius, and yet nothing is more true. I awoke with my head troubled, and my ideas heavy with the vapours of an ample supper. I was astonished that my spirits were not as pure and as free as in Mathurin, or in Mason Street. Ah! 'tis that the labour of the imagination will not be disordered by that of other organs. The muses, it has been said, are chaste, it should have been added, that they are temperate."†

An ingenious French writer, remarks Mr. Pinkerton, observed to me, that if he wished to employ his evenings in composition, he drank nothing but water at dinner, as even the smallest quantity of wine was sufficient to cloud his ideas, so that he was obliged to alter on the following morning the little that he had been able to accomplish in the evening.‡ The wine to which allusion is made, was, like most French wines, weak, and but slightly intoxicating, and unlike our modern brandied and fiery compositions.

The effects of abstinence in preparing the mind for those efforts, when not only mental energy, but a rich and fertile beauty of imagination is required, have been observed from a very early period of the world. During hours of intense study, many of the most celebrated philosophers of old, abstained from everything that was rich and stimulating in diet. Demosthenes,

* Parliamentary Report—Select Committee, p. 4.

† Memoirs of Marmontel, vol. i. p. 306.

‡ Recol. of Paris, vol. ii. p. 356.

the celebrated Grecian orator, as a beverage, drank water only. Protogenes, a painter of great eminence among the ancients, when executing some splendid design, lived in the most frugal manner. Painters of our own age have adopted a similar plan. Fresnoy, in his maxims for the artist, thus remarks :

“To temperance all our liveliest powers we owe,
She bids the judgment wake, the fancy flow;
For her the artist shuns the fuming feast,
The midnight roar, the bacchanalian guest.”

Individuals distinguished in the annals of literature and science, in more recent times, have adopted a similar practice. Milton and Dryden form illustrious examples. Milton not unfrequently recommends abstinence in diet. To the lyric and elegiac poet, he admits of the use of wine and good cheer; but to the epic, which requires intellect of a higher and more comprehensive character, the diet of Pythagoras must suffice.

“For many a god o’er elegy presides,
Its spirit kindles, and its numbers guides,
There Bacchus, Ceres, Erato, are seen,
And with her beauteous boy, the Idalian queen;
And thence the chiefs of elegiac song,
Drain the full bowl, and join the jocund throng.
But he whose verse records the battles roar,
And hero’s feats and demi-gods of yore;
The Olympic senate with their bearded king,
Or howls, that loud through Pluto’s dungeons ring;
With simpler stores must spread his Samian board,
And browse, well pleased, the vegetable hoard
Close at his side the beechen cup be placed,
His thirst by nature’s limpid beverage chased.”

Dryden is evidently satirized by Baynes, who thus alludes to his preparation for study by a course of medicine. “When I have a grand design, I ever take physic and let blood; for when you would have pure swiftness of thought, and fiery flights of fancy, you must have a care of the pensive part, in fine, you must purge the belly!!!” This practice, we are informed by La Motte, the physician, was actually adopted by Dryden.

Dr. Cheyne, in allusion to the intimate connexion which exists between the condition of the body and the state of the mind, makes use of this emphatic observation, “He who would have a *clear head* must have a *clean stomach*.” Kotzebue remarks that a disordered stomach extinguishes the flame of genius. Cicero tells us to take care of the health of the body, for that without it the mind can effect nothing. A physician of modern times correctly observes that that genius is comparatively lost to the world which is not sustained by a sound body: it perishes in its own fire.

Franklin, in his youthful days in particular, was remarkable for his abstemiousness. His food was principally vegetable—his drink water. To this diet he attributes his progress in study, which was accompanied with clearness of ideas and quickness of conception.

Euler and La Place, the one celebrated for his proficiency in mathematical science, the other distinguished as a natural philosopher, were each habitually abstemious in

their diet. Euler attained to the age of seventy-six years. In society he was most acceptable, ever adding to its gratification by his agreeable wit, and cheerful and uniform temper. The light and abstemious diet of La Place alone enabled him, until within two years of his death, without exhaustion or inconvenience, to persevere in his accustomed habits of continued and intense study. John Locke, by his abstemious habits attained to the age of seventy-three years. In the former part of his life he had a feeble constitution; the asthma for many years proved to him a source of considerable depression and distress. To the use of water, which was his common drink, Locke very justly attributes the prolongation of his life. Boyle, who undoubtedly ranks as the first chemist of his age, also made use of water. Although possessed of an exceedingly delicate constitution, this distinguished patron of science lived to the age of sixty-five years. Sir Isaac Newton was habitually abstemious in his diet; he died at the advanced age of eighty-five years; and it is a well known fact, that when he composed his admirable Treatise upon Optics, he abstained altogether from stimulating liquors and animal food, restricting himself to water and to vegetables. Luther also, and Johnson, may be cited as equally illustrious examples. Of the former, one of his biographers states:—“It often happened, that for several days and nights he locked himself up in his study, and took no other nourishment than bread and water, that he might the more uninterruptedly pursue his labours.” In 1737, Dr. Johnson, according to Boswell, abstained entirely from fermented liquors, “A practice to which he rigidly conformed for many years together, at different periods of his life.” Dr. Johnson himself made the following remarks:—“By abstinence from wine and suppers, I obtained sudden and great relief, and had freedom of mind restored to me, which I have wanted for all this year, without being able to find any means of obtaining it.”*

Mr. Croker, in his edition of Boswell’s Life of Johnson, makes the following pertinent remarks on the passage just quoted from that work:—“At this time his (Dr. Johnson’s) abstinence from wine may perhaps be attributed to poverty, but in his subsequent life, he was restrained from that indulgence by, as it appears, moral, or rather, medical considerations. He probably found, by experience, that wine, though it dissipated for a moment, yet eventually aggravated, the hereditary disease under which he suffered; and perhaps, it may have been owing to a long course of abstinence, that his mental health seems to have been better than in the earlier portion of his life. Selden had the same notion:

* Prayers and Meditation, p. 13.

for being consulted by a person of quality, whose imagination was strangely disturbed, he advised him not to disorder himself with eating or drinking, to eat very little supper, and say his prayers daily, when he went to bed; and he (Selden) made but little question but he would be well in three or four days."* "These remarks," further observes Mr. Croker, "are important, because *depression of spirits* is too often treated on a contrary system, from ignorance of, or inattention to, what may be its *real cause*."

To these examples might be added a voluminous list of individuals celebrated in the annals of literature and science.

Mr. Foster makes some judicious remarks on this branch of our investigation. "A person," he observes, "suffering from a temporary loss or disappointment, has recourse to the use of wine or spirits, the stimulus of which affords a momentary relief from mental sufferings. A disordered state of the digestive organs, is, however, invariably the consequence of such practices, which, re-acting on the sensorium, increases the mental disorder, and gives it a peculiar character. The patient, now, is not only distressed about the original subject of grief, but takes atrabiliary views of every surrounding object. The constant habit of drinking, by weakening the digestive powers, predisposes the viscera to disorder; and by this means renders them more liable to be affected by the mind, and to re-act on it to the aggravation of the original disturbance. *Thus spirituous and fermented liquors can convert common grief, which in health would soon subside, into a compound of mental and bodily derangement, that, by its very nature, must be aggravated in its progress, and may produce organic disease, incontrollable by medicine, and eventually terminating in madness.*"†

Woolman, in more than one of his productions, refers in pointed language to the effects of strong liquors on mental perception. "I have found," he remarks, "that too much labour in the summer heats the blood, that taking strong drink to support the body under such labour, increaseth that heat, and though a person may be so far temperate as not to manifest the least disorder, yet the mind in such circumstances, doth not retain that calmness and serenity, which we should endeavour to live in."‡ And again, "When people are spent with action, and take these liquors, not only as a refreshment from their past labours, but also to support them to go on, without nature having a sufficient time to recruit, by resting; *it gradually turns them from that calmness of thought, which attends those who apply their hearts to true wisdom. That the spirits being*

scattered by too much bodily motion, and again revived by strong drink, *makes a person unfit for Divine meditation*, I suppose will not be denied; and as multitudes of people are in this practice, who do not take so much as to hinder them from managing their affairs, this custom is strongly supported; but as, through Divine goodness, I have found that there is a more quiet, calm, and happy way, intended for us to walk in, I am engaged to express what I feel in my heart concerning it." — "*The frequent use of strong drink, works in opposition to the celestial influence on the mind.*" "This is plain, when men take so much as to suspend the use of their reason; and though there are degrees of this opposition, and a man, quite drunk, may be furthest removed from *that frame of mind in which God is worshipped*; yet a person being often nearly spent with too much action, and revived by spirituous liquors, without being quite drunk, *inures himself* to that which is a less degree of the *same thing*; and by long continuance thereof, must necessarily hurt the mind. — Nor is it reasonable to suppose, that so many thousand hogsheads of this fiery liquor, can be drunk every year, and the practice continued from age to age, *without altering in some degree the natures of men, and rendering their minds less apt to receive the pure truth in the love of it.*"*

Examples of abstinence from strong drink, in connexion with remarkable exhibitions of intellectual strength are not uncommon. The Senior Wrangler, in the University of Cambridge, for the year 1803, was and is a water drinker. The same statement is true in regard to the Senior Wrangler and Senior Medallist for the year 1809.†

3. *Incorrect Judgment.* — The mind, enervated by artificial stimulants, loses its power of forming a correct judgment. The faculties by which the judgment comes to a decision, are weakened, and rendered more or less inoperative by the want of reflection. The judgment, therefore, is little exercised, and loses its force and activity,—and when formed, is crude and unstable. "Wine," remarks an eminent writer, "raises the imagination, but depresses the judgment. He that resigns his reason, is guilty for everything he is liable to in the absence of it." The effects of intoxicating liquors on the judgment are strongly adverted to in the scriptures. "It is not for kings, O Lemuel, it is not for kings to drink wine; nor for princes strong drink: lest they drink and forget the law, and pervert the judgment of the afflicted."‡

"The known effects of fermented liquors on the intellects," observes Sir A. Carlyle, "are the increased rapidity of thought, the

* Table Talk, p. 17.

† Physiological reflections on the destructive operation of spirituous and fermented liquors on the animal system. By F. Foster, F.R.S.

‡ Woolman's Works on Labour, p. 336.

* A word of Remembrance and Caution to the Rich. By J. Woolman. London, 1794. chap. vi.

† Inquiries into the Effects of Fermented Liquors, by Basil Montague, Esq., 1818.

‡ Proverbs, xxxi. 4, 5.

destruction of continuity in the memory, and the derangement of the natural faculty of judging or concluding upon the sum of any sort of evidence." Sumptuary laws, both in ancient and modern times, relating to magistrates and other official characters, have been framed on the same principle. These will be detailed at length in a succeeding Section.

The statements of historians in every age evidence a necessity for such salutary restrictions. De Foe thus writes,

The seat of judgment's so debauched with wine,
Justice seems rather to be drunk than blind;
Let's fall the sword, and her unequal scale,
Makes right go down, and injury prevail.*

4. *Impaired Memory.*—The strength of the memory is materially impaired by the use of intoxicating liquors. In the words of Sir A. Carlyle, its continuity is destroyed. "The memory," remarks this writer, "is always weakened by a rapid succession of evanescent impressions, the objects of thought are loosely assorted by a disorderly imagination; and the power to give a close and continuous attention to particular studies, is destroyed by an acquired habit of slovenly and heedless inductions. The mind is often diverted from more serious activity by idle wit, by ludicrous combinations, or vain and unprofitable wanderings." "Who has a stupid intellect," says Dr. South, "*a broken memory*, and a blasted wit, and, which is worse than all, a blind and benighted conscience, but the intemperate and luxurious, the epicure and the smell-feast." Decay of memory is one of the first prognostics of the intellectual ravages effected by strong drink.

VI. It is a subject of deep regret, as well as a cause of intellectual and moral degradation to themselves, that many of the most eminent literary characters of both ancient and modern times, have, in a greater or less degree, indulged in the use of intoxicating liquors. The mental excitement to which such persons are subject, forms, no doubt, the predisposing cause, to this unhappy propensity, in connexion with the peculiar temptations which beset most public characters. Hence, the moral powers in particular are in continual danger of losing the purity, as well as vigor, which constitutes so essential a portion of the character of a well-regulated mind.

A prominent cause of the intemperance of literary characters, consists in the irregular moral training to which most of them are subject. Modern education is directed in a great measure, to intellectual development, while moral culture is almost if not altogether neglected. Hence, in too many instances, intellectual exhaustion is sought to be relieved by artificial excitement.

The biographies of ancient celebrated philosophers and statesmen present lament-

able examples of loose morality, combined with intellectual acquirements. Many of the heathen philosophers seem to have viewed occasional drunkenness as perfectly compatible with a virtuous life. *Cato*, in the words of Horace, presents a remarkable instance;—Corvinus, the stoic philosopher, also indulged in vinous potations:—

"Come, Corvinus, guest divine
Bids me draw the smoothest wine
Though with science deep imbued,
He not like the Cynic rude
Thee despises: for of old,
Cato's virtue, we are told,
Often with a bumper glowed,
And with social rapture:"*

Seneca, another philosopher, states, that *Cato* occasionally indulged in wine, as a relief from the cares of public business. *Cato vino laxabat animum curis publicis fatigatum*; and elsewhere himself remarks, that people reproached *Cato* with drunkenness, but that such reproach was rather an honour to him than otherwise. *Catoni ebrietas objecta est, et facilius efficiet quisquis objecerit honestum quam turpem Catonem*. Seneca himself even recommended occasional drunkenness, as a means of banishing sorrow. Anacharsis, the Scythian philosopher, at times indulged to a free extent in the use of inebriating liquors.* *Ælian* includes in his catalogue of hard drinkers, Amasis, the lawgiver of Greece. Zenocrates and Zeno, were subject also to the same vice. Stilpo, of Megara, who was one of the chiefs of the Stoics, when about to die, intoxicated himself, with the view to alleviate the terrors of death. Other heathen philosophers of note might be adduced, as degrading examples of intellectual eminence, sullied and debased by sensual indulgence.

Nor were certain of the heathen poets more strict in their conduct. Their poems were often interspersed with encomiums on wine, and their conduct frequently exhibited a pitiable want of moral correctness and strength. Ion, the tragic poet, according to *Ælian* and Euripides, was noted for vinous indulgence. Philoxenus declared that he longed for a neck like a crane, that he might the longer enjoy the taste of wine, of which he was immoderately fond. Ennius and Alceus, rank also in the class of notorious toppers. The former poet died of the gout, induced by habits of gross intemperance. Timocreon, of Rhodes, a comic poet, also was addicted to the same debasing vice. Athenæus informs us, that the following epitaph was inscribed on his tomb:—

"Multa bibens, et multa vorans, mala denique
dicens
Multis, hic jaceo Timocreon Rhodius."

Pausanias informs us, that when he was at Athens, he saw the statue of Anacreon, which represented that poet as drunk and singing. The lays of Anacreon are chaunted

* Reformation of Manners, Part 2.

* Duncan.

† *Ælian*, lib. ii. 2.

by every votary of Bacchus, and the verses of Homer (who is described as having been temperate in his habits) teem with the praises of wine. The poets in ancient days are said to have met together once a year, in the month of March, to celebrate a festival in honour of Bacchus and wine. Ovid thus alludes to this practice :—

“ Illa dies hæc est, qua te celebrare poetæ,
Si modo non fallunt tempora, Bacche, solent,
Festaque odoratis innectunt tempora sertis
Et dicunt laudes ad tua vina tuas.
Inter quos memini, dum me mea fata sinebant,
Non invisâ tibi pars ego sepæ fui.”*

The poets in the time of De Foe, appear to have been no less noted for their attachment to the bottle :—

“ Poets long since Parnassus have forsaken,
And say the Ancient Bards were all mistaken.
Apollo’s abdicate and fled,
And good King *Bacchus* governs in his stead ;
He does the chaos of the head refine,
And atom-thoughts jump into words by wine :
The inspirations of a finer nature :
As wine must needs excell *Parnassus* water.”†

Philips, in his well-known poem, exclaims :—

“ See! the numbers flow
Easy, whilst, cheer’d with her nectareous juice,
Her’s and my country’s praises I exalt.”‡

Geoffery Chaucer had a pitcher of wine apportioned to him every day. Ben Johnson had an annual allowance of a third of a pipe of wine, of which liquor the laureates of our country have had a larger or more limited portion allowed to them down to the present period. Whether this practice had its origin in the bibulous propensities of our ancestors, or to some supposed poetic power inspired by wine, it is difficult to say. “ I am ignorant,” says Dr. Trotter, “ of what stupendous works of genius have been planned by fancy, ‘ *in a fine frenzy rolling,*’ over the fumes of wine. I rather suspect that such buildings may be compared to castles in the air.”

Ben Johnson in his admired poem, “ Inviting a Friend to Supper,” says—

“ But that which most doth take my muse and me
Is a pure cup of rich Canary wine,
Which is the mermaid’s now, but shall be mine.”

The poet, however, recommends moderation in the use of rich Canary.

“ Of this we will sup free, but moderately ;
Nor shall our cups make any guilty men,—
But at our parting we will be as when
We innocently met. No simple word,
That shall be utter’d at our mirthful board,
Shall make us sad next morning, or affright
The liberty that we’ll enjoy to night.

Johnson, unfortunately, like many of his brother poets, did not himself practice the moderation he recommends. Aubreux informs us that “ he would many times exceed in drink ;” and that “ Canary was his beloved liquor.” Drummond also asserts that “ Drink was the element in which he lived.”

The examples here adduced are illustrations

of intellectual degradation, where we should naturally expect the highest examples of mental cultivation, issuing in the purest principles of moral rectitude. It is evident that the amount of *moral evil influence* thus exhibited by men of superior talents, must have been productive of most pernicious results.

Dr. Trotter remarks that we are apt to imbibe sentiments in praise of wine with our classical education, and preserve them through life, on account of the elegant taste and language in which they are written. But he further remarks, when we come to engraft them on the useful affairs of the world, they elevate the mind above the realities around it, and give a dangerous bias to the moral character.*

In more recent times, men of intellectual eminence and mental strength, have displayed a similar fondness for strong drink, and want of moral restraint.

Pitt, the celebrated statesman, according to a recent writer, would retire in the midst of warm debate, and indulge to the extent of a couple of bottles of wine. “ The quantity of wine that would have closed the oratory of so professed a Bacchanalian as Sheridan, scarcely excited the son of Chat-ham.”† His friend, Lord Melville, (Henry Dundas) was also much addicted to vinous indulgence. Of Fox, a similar statement may be made. The habits of Sir Richard Steele, Addison, Porson, Sheridan, and Burns, are too well known to require further detail. It is recorded of Addison, that on one occasion, when in company with Voltaire, he drank to such excess as to vomit, on which that French writer remarked, in a sarcastic manner—*that the only good thing that came out of Addison’s mouth in his Voltaire’s) presence was the wine that had gone into it.*

Ælian informs us that Antigonus, the Emperor, on one occasion, when in drink, met Zeno, the philosopher, who was one of his favourites, and kissed him, and promised to grant him any favour which he might desire. Zeno, mildly replied that if he would go and ease his stomach by vomiting, that was all at present he would require.

To this catalogue of illustrious toppers, might be added, if necessary, others distinguished in the pages of modern literature. Those already cited, however, are amply sufficient to establish the point at issue. They present to our notice melancholy examples of exalted genius, closely connected with this most debasing vice, in too many instances, to the utter extinction of moral excellence in their brilliant characters.

VII. *The influence of intemperance on the character of the literary productions of celebrated men, forms an interesting subject of inquiry.*—Writers, both in ancient

* OVID, *Trist.* v. 3.

† True-born Englishman—Part ii.

‡ CYDER, Book i., line 5, 21, 3, 4.

* Essay on Drunkenness, p. 184.

† Rede’s Memoir of the Right Hon. George Canning.

and in modern times, are described as having composed under the influence of strong drink. *Æschylus* is said never to have composed but when in a state of intoxication. It is stated, that the imagination of the poet was strong and comprehensive, but disorderly and wild; fruitful in prodigies, but disdaining probabilities. It is said, further, that when he composed, his countenance betrayed the greatest ferocity; and, according to one of his scholars, when his *Eumenides* were represented, many children died through fear, and several pregnant women actually miscarried in the house, at the sight of the horrible masks that were introduced. His general style was peculiarly obscure.

Horace thus speaks of *Ennius* :—

“ *Ennius ipse pater nunquam nisi potus ad arma
Prosiluit dicenda.** ”

Alcæus also, we are told, never sat down to compose tragedy, but when in a state of intoxication.

Aurelius, the sophist, according to some writers, composed his most popular declamations in his cups. The disciples of *Paracelsus*, it is said, got him to dictate when in a state of inebriation.

Horace makes the following bold assertion : it is entitled to rank among other of his poetical fictions :

“ *Nulla placere diu, nec vivere carmina possint,
Quæ scribuntur aquæ potioribus.* ”

How far intemperance may have impaired the *genius*, *perverted the morals*, and thus influenced the *tone* of the writings of ancient and modern authors, is a subject well worthy of investigation. Many examples might be adduced from the records of modern times, where eminent writers have composed under the influence of strong drink.

Lord Byron presents a most instructive example of the effects of injudicious diet on disposition, and the character of literary productions. The education of this melancholy wreck of genius, was imperfect, and unsuited to his peculiar nature and hereditary predisposition. His general habits, however, of indulgence, roused his natural imperfections to an ungovernable extent, and hence the origin of numerous excesses, which in his sober moments occasioned bitter feelings of regret and disgust. When at Venice, in 1817 and 1819, Lord Byron's nocturnal excesses were frequent and long continued. During the former year he writes as follows :—“ Sitting up late, and some subsidiary dissipations, have lowered my blood a good deal ; but I have at present the quiet and temperance of Lent before me.” After this he was subject to a slow fever, which he describes with truth as endemical in that district. But his previous excesses, doubtless predisposed his system to the attack, as well as rendered it

cure a matter of more difficulty and lengthened accomplishment. In a letter, written to Murray, his publisher, Lord Byron acknowledges the influence which this condition of his body had on the character of his writings. “ The third act (of *Manfred*) is certainly — bad, and like the Archbishop of Grenada's homily, (which savoured of the palsy,) has the dregs of my fever, during which it was written. It must on no account be published in its present state.” —Mr. Moore says, “ so far from the powers of his intellect being at all weakened or dissipated by these irregularities, he was perhaps at no time of his life so actively in the full possession of all its energies.” This opinion is no less erroneous than inconclusive. The effects of Lord Byron's excesses might not perhaps be obvious at that precise period. Changes of temperament are gradual in their operation, and the effects produced are not in general either immediate or distinct. It was at this period that Lord Byron commenced *Don Juan*. Leigh Hunt states that “ *Don Juan* was written under the influence of gin and water.* ” In another epistle, addressed to Mr. Murray, some months afterwards, he acknowledges the stern necessity for reform. “ About the beginning of the year, (1819,) I was in a state of great exhaustion, attended by such debility of stomach, that nothing remained upon it ; and I was obliged to reform my ‘ way of life,’ which was conducting me from the yellow leaf to the ground, with all deliberate speed. *I am better in health and morals.* ” Even at this period of his reform, he suffered much from irregular and unnatural habits. Late hours formed another direct cause of bad health, and consequent depression of spirits. We need not therefore wonder at the records of his Journal. In his Diary, dated January 6th, 1821, he asks, —“ What is the reason that I have been, all my life time, more or less *ennuye* ? ” and then he informs us that temperance and exercise make little or no difference. Lord Byron's actions were ever characterized by extremes. At one time, he indulged in the most irregular excesses—then adopted a rigorously unwise course of abstinence, both equally far removed from the confines of temperance.

Mr. Moore describes the diet of Byron, at Diodati, as follows :—“ His system of diet was regulated by an abstinence almost incredible. A thin slice of bread, with tea, at breakfast—a light vegetable dinner, with a bottle or two of Seltzer water, tinged with Vin de Grave—and in the evening a cup of green tea, without milk or sugar, formed the whole of his sustenance. The pangs of hunger he appeased by privately chewing tobacco and smoking segars.” This system of diet Lord Byron seems to look upon as

* 1 Ep. xix. 7.

† Lord Byron and some of his Contemporaries by Leigh Hunt.

temperate. It was certainly admirably calculated to foster and increase, if not to generate those morbid feelings which subjected his Lordship to continual mental depressions. A diet composed of green tea, unmixed with nutritive milk or sugar, and tobacco, upon an empty stomach, could not but be deleterious in its effects.

At Milan, in October of the same year, we are told that he "often sat up all night in the ardour of composition, and drank a sort of grog, made of Hollands and water—a beverage in which he indulged rather copiously, when his muse was dry."* In a letter from Verona, not long after this, he says, "My health is very enduring, except that I am subject to casual giddiness and faintnesses." Mr. Moore describes his breakfast, which he rarely took before three or four o'clock in the afternoon, as speedily despatched, being ate standing, the meal in general consisting of one or two raw eggs, a cup of tea, without either milk or sugar, and a bit of biscuit.

In Venice, Lord Byron was most profligate in his life. He writes (January 28th, 1817,) to Moore in the following strain—"The remedy for your plethora is simple—abstinence. I was obliged to have recourse to the like some years ago, I mean in point of *diet*; and with the exception of some convivial weeks and days, (it might be months, now and then,) have kept to Pythagoras ever since. For all this, let me hear that you are better. You must not *indulge* in 'filthy beer,' nor in porter, nor eat *suppers*. The last are the devil to those who swallow dinner."

Now let us ascertain the dinner taken by this noble disciple of Pythagoras, as detailed in his Diary at Ravenna, January 5th, 1821, after having risen late in a dull and depressed state of mind.—"Dined versus six of the clock. Forgot there was a plumb pudding, (I have added, lately, *eating* to my family of vices) and had dined before I knew it. Drank half a bottle of some kind of spirits—probably spirits of wine; for what they call brandy, rum, &c., &c., here, is nothing but spirits of wine coloured accordingly. Did *not* eat two apples which were placed by way of a dessert." January 6th, he asks why he has all his life been more or less *ennuye*, as well as the cause of "waking in low spirits, which I have invariably done for many years." January 14th, he writes as follows:—"Read Diodorus Siculus—turned over Seneca, and some other books. Wrote more of the tragedy. Took a glass of grog; after having ridden hard in rainy weather, and scribbled and scribbled again, the spirits, (at least mine) need a little exhilaration, and I do not take laudanum now as I used to do. So I have mixed a glass of strong waters and single waters, which I shall now proceed to employ.

Therefore and thereunto I conclude this day's diary."

Immediately after the above description of his dinner, Lord Byron makes the following admission:—"The effect of all wines and spirits upon me is, however, strange. It *SETTLES*, but IT MAKES ME GLOOMY—gloomy at the very moment of their effect, and not gay, hardly ever. But it composes for a time, though sullenly."

What a miserable state of mind—how unwise to seek relief from so questionable a source of cure. The consequences were lamentable, as his diary testifies, and may well serve to warn others to avoid the same irregular habits. A day or two afterwards, he feels "rather in low spirits—certainly hippish—liver touched"—and will take a dose of salts. This condition was the result of late hours, strong drink, and a paroxysm of rage—into which latter state, from some comparatively trivial cause, he fell on the 18th of the same month.

February 16th, 1831, Lord Byron says,—"at nine, P.M., went out—at eleven returned. Beat the crow for stealing the falcon's victuals—read 'Tales of my Landlord'—wrote a letter—and mixed a moderate beaker of water with other ingredients."—February 25th, he also says,—"Came home—my head aches—plenty of news, but too tiresome to set down. I have neither read, nor written, nor thought, but led a purely animal life all day. I mean to try to write a page or two before I go to bed. But as Squire Sullen says, 'My head aches consumedly: Scrub, bring me a dram!' Drank some Imola wine and some punch." The night following, he remarks, "I suffered horridly, from an indigestion, I believe." He then tells us that he was prevailed upon the previous night (contrary to usual practice) to sup, or to use his own words, swallow a "quantity of boiled cockles, and to dilute them, *not* reluctantly, with some Imola wine." "When I came home," he further states, "apprehensive of the consequences, I swallowed three or four glasses of spirits, which men (the venders) call brandy, rum, or Hollands, but which god's would entitle spirits of wine, coloured or sugared. All was pretty well till I got in bed, when I became somewhat swollen, and considerably vertiginous. I got out, and mixing some soda powders, drank them off. This brought on temporary relief. I returned to bed, but grew sick and sore once again. Took more soda water. At last I fell into a dreary sleep. Woke and was ill all day, till I had galloped a few miles. Query was it the cockles, or what I took to correct them, that caused the commotion? I think both. I remarked in my illness the complete inertion, inaction, and destruction of my chief mental faculties. I tried to rouse them, and yet could not—AND THIS IS THE SOUL!!!" A soul not the image of its divine Creator, but the effects

* Galt's Life of Byron. Appendix.

of luxury—deadened with excess—its original brightness obscured by the demoralizing influence of corporeal excess. Need we wonder that such habits often terminate in open scepticism—or can we feel surprised that the literary productions of such men exhibit in every page marks of moral debasement? In September of the same year, in giving some directions concerning papers and letters in the event of his death, he remarks, “I am not sure that long life is desirable for one of my temper and constitutional depression of spirits, which of course I suppress in society, but which breaks out when alone, *and in my writings*, in spite of myself.” His removal to Pisa, and his diet in that place, contributed little either to his mental or bodily improvement. Mr. Moore informs us that at midnight until the morning was far advanced, he drank and talked with Captain Medwin. These continued irregular habits had their due effect on his character as a writer. He wrote but little, and that little displayed evident symptoms of an impaired genius. His articles in the *Liberal*, written at this period, are neither characterized for their moral tone nor their intellectual vigor.

These characteristic extracts lead us to reflect on a passage in a letter dated, Venice, 1818.—“I will work the mine of my youth to the last veins of the ore, and then—good night! I have lived, and am content.” Fallacious notion! His spirit was harassed with anxieties and depressions, not the result of temperament and hereditary transmission alone, but the consequences of irregular diet, and unrestrained passions. Poor Byron! He suffered both in a mental and corporeal point of view, the penalties of imprudence. His conduct and its results, present a beacon to warn others to avoid the same destructive path.

De Foe, thus satirizes the style of Poems in his day, as well as the *taste* of the public, which encouraged light and immoral productions:—

“And should *Apello* now descend and write,
In virtue’s praise ’twould never pass for wit.

* * * * *

The sprightly part attends the *God of Wine*,
The drunken stilt *must blaze* in every line.
These are the modern qualities must do,
To make the poem and the poet too.”*

Mr. Thackrah, in his well known work, “The Effects of Arts, Trades and Professions, on Health and Longevity,” remarks, “Some literary men have been in the habit of taking vinous and spirituous liquors, but this practice is decidedly injurious. The intellectual excitement it produces at the time is more than counterbalanced by the subsequent depression; and ruin of health, and the abbreviation of life, are the ultimate results. Fermented liquors are decidedly injurious.”

Mr. Newnham, in his valuable “Essay on the Disorders incident to Literary Men,” makes the following judicious remarks: “Some persons employ alcoholic stimuli, and others opium, in order to make themselves up to high intellectual action. To all such let me say, instantly, energetically, uncompromisingly, abandon now and for ever such a habit, if you value life, if you value usefulness, if you value social character, if you value present happiness, if you value peace of mind, if you desire the continuance of intellectual power, if you would avoid all the miseries of a paralytic old age, and premature imbecility; and if you would not plant the thorn of bitterest remorse, arising from reflection on intellectual power abused, and talent relentlessly destroyed, on the pillow of sickness, and the bed of death. And to all those who might in future be tempted to have recourse to similar means, let me say, avoid it as your deadliest foe, the implacable enemy to usefulness, to vigor, to health of body and peace of mind, to all that intellectual men should hold most dear, and even to life itself.”

Lockhart, in his “Life of Sir Walter Scott,” informs us that he had heard that well known writer exclaim, “Depend upon it, of all vices, drinking is the most incompatible with greatness.”

VIII. The influence of strong drink on individuals may be discovered in its effects as exhibited in the various active conditions of life.

Man was intended to possess feelings of personal and national independence. The demoralizing and impoverishing influence of strong drink, diminishes from personal independence, and hence, to this source we may trace innumerable applications for relief from the various charitable institutions of this country. Thousands of intemperate characters in the present day apply to these benevolent establishments, for the support of those families whose wants ought to have been supplied by the industry of its head, had it not been rendered abortive by habitual intoxication. Were it not for intemperance, few persons, comparatively speaking, would be necessitated to apply for relief from our public charitable institutions, and the various private feeding and clothing associations, now in active operation, would, in all probability, be done away with, because the savings of the temperate poor would be reserved for occasions of extraordinary necessity. No state of things can be more dangerous to national welfare, than the decay of personal independence. When men are *ordinarily* induced to apply for support to public or private charities, they are in danger, from the degradation to which the mind is thereby more or less subjected, of losing that spirit of personal freedom, which is both a powerful and honourable stimulus to industry and perseverance. Let an examination be made

* Reformation of Manners—Part ii.

of the great mass of persons thus applying for relief, and there is every probability that a large majority will be found to have been brought to that degrading condition from the direct or indirect influence of intemperance.

Man is evidently intended to be both a benevolent and a social being. His nature requires the endearing bonds of human sympathy and reciprocal aid. Strong drink uniformly exercises a selfish influence over its votaries. It detaches a man, as it were, from his natural disposition, alienates him from his social attachments and duties, paralyzes his sense of benevolent obligation, and creates a centre of feelings and sympathies in his vitiated affections, purely selfish and personal. A principal source of human happiness in our present state of existence, is to be found in the endearing relations of *social and domestic intercourse and enjoyment*. A slight review of the effects of intoxicating liquors, will show that their habitual use is opposed to these truly rational and exquisite pleasures. Inebriating liquors not only make man a selfish being, but they form strong inducements for him to seek the pleasures which society affords *from home*. The irritable state of mind which the use of strong drink occasions, forms an insuperable obstacle to domestic happiness, and hence the flight of their wretched victims from the bosom of an affectionate family to the savage haunts of intemperance and vice. The domestic scenes of many of our celebrated lovers of strong drink present convincing examples of these dreadful results of intoxication upon the social and domestic relations of life.

SECTION II.

THE EVIL EFFECTS OF INTEMPERANCE CONSIDERED
IN A NATIONAL POINT OF VIEW.

“Because of drunkenness the land mourneth.”

“Pass where we may, through city or through town,
Village, or hamlet, of this merry land,
Though I can and beggar'd, every twentieth pace
Conducts the unguarded nose to such a whiff
Of stale debauch, forth issuing from the styes
That law has licensed, as makes Temperance reel.

“Tis here they learn
The road that leads from competence and peace
To indigence and rapine: till at last
Society, grown weary of the load,
Shakes her encumber'd lap, and casts them out.
But censure profits little; vain the attempt
To advertise in verse a public pest,
That, like the filth with which the peasant feeds
His hungry acres, stinks, and is of use.
The excise is fatten'd with the rich result
Of all this riot; and ten thousand casks,
For ever dribbling out their base contents,
Touch'd by the Midas-finger of the State,
Bleed gold, for ministers to sport away.
Drink, and be mad, then, 'tis your country bids!
Gloriously drunk—obey the important call!
Her cause demands the assistance of your throats;
Ye all can swallow, and she asks no more.”

COWPER.

1. Introductory observations, and examples of the evils which result from national intemperance in France, Sweden, Russia, Ireland, and Australia.—II. Extent of intemperance in Great Britain, Ireland, and America.—III. Evils resulting from intemperance to national industry and wealth.—1. Loss of disposition for industry—loss of time—labour—capital, and employment.—2. General state of poverty through intemperance.—3. Immense destruction of grain from the manufacture of intoxicating liquors.—4. Loss of property through intemperance both on land and on sea.—5. Loss to trade and the manufactures, and change of ownership of property through the same cause.—6. Loss in other various ways with calculations of the total national loss through the traffic.—IV. Evils resulting to national morals from intemperance.—1. General examples in past times.—2. Effects of intemperance on morals in the colonies, and other possessions of Great Britain.—3. Effects of intemperance in the present day in the production of dishonesty and crime.—4. Intemperance, sabbath-breaking, and other profanities.—5. Intemperance and prostitution.—6. Intemperance and litigation.—V. Effects of intemperance on national intellect and education.—VI. Effects of intemperance on freedom, patriotism, national enterprise and the transaction of public business.—VII. Effects of intemperance on national health and longevity.—1. Effects of strong drink on health in former times.—2. State of health of nations where intoxicating liquors are not used.—3. Effects of intemperance in the production of disease.—4. Effects of intemperance on mortality.

I. NATURE has implanted in the breast of all men an affection for the land of their birth. Everything, therefore, which tends to increase the welfare and happiness of nations, has peculiar claims upon the attention of the philanthropist. The remote causes of national degeneration are so minute and unobvious, as generally to elude observation. Hence, the most effectual means of reformation have, unfortunately, too often been unseen or neglected.

It is to be feared, that, in the present day, vice, in all its varied forms has become so familiar to Christian observation, as to be viewed with far too little apprehension and alarm. To this source may be ascribed the apathy which is manifested as to those lamentable evils, which arise from the use of intoxicating liquors. Every man, reflecting on intemperance, must deplore its consequences. The cause or causes, however, by which this humiliating vice is produced and cherished are, it is evident, overlooked, and in a great degree, encouraged. The custom of drinking is so generally and so intimately interwoven with the social habits of life, that few persons entirely escape from its contaminating influence. All national evils originate in individual practice, and the extension of its influence and example. The *minute*, or solitary evil gradually multiplies and accumulates, until it becomes a gigantic and wide spreading vice. Thus, in an especial manner, has it been with intemperance, which has been characterized in every age, by its insidious and *progressive* advances.

The influence of intoxicating liquors on national prosperity, deserves the most profound attention of the political economist. It is inseparably connected with the stability

and welfare of nations. The subject has, indeed, more or less, occupied the attention of philosophical moralists, but until a very recent period, it did not receive that degree of even local attention which its vast importance demanded. Indeed, the British Government has never actively interfered for the suppression of this vice; but on the contrary, the immense revenue arising from this iniquitous source, has operated as a passport to the patronage of the legislature, in favour of the more extensive consumption of those pernicious poisons.

Louis XII., of France, A.D. 1514, first allowed spirits to be manufactured in that kingdom on a large scale. The consequences to the nation were so terrible, that in twenty-two years afterwards, Francis, his successor, was necessitated, for the safety of his subjects, to enact severe laws for the suppression of drunkenness. Every individual on conviction was, for the first offence, condemned to undergo imprisonment, with bread and water for his diet; whipping was the penalty for the second offence; and for the third, banishment, in addition to the ears being cut off as a signal mark of ignominious punishment. Louis XIV., also had recourse to rigorous measures for the same purpose. But it is not easy to eradicate the appetite for strong drink when it has once taken deep root. In 1678, brandy, instead of being confined as it hitherto had been, to the shops of the apothecaries, was sold publicly in the streets. Facilities also had been held out for the more extensive sale of wine, and the use of strong drink, in one or other of its forms, soon became associated with all the habits of business and social intercourse.

Sweden presents another instance of this kind. Previously to the year 1783, that nation had been comparatively free from the evils which arise from the use of strong drink. In that year, however, Gustavus, to increase the revenue, not only permitted the manufacture of ardent spirits, but actively encouraged the establishment of houses for its sale, in all the villages and towns of his kingdom. The object he had in view was attained, but the consequences soon became frightful in the extreme. Crime, poverty, disease, and mortality, so fearfully increased, that the same king was eventually obliged to pass severe enactments to restrain the use of what previously he had been so active in promoting. Had these measures not been put into operation, the kingdom of Sweden was in imminent danger not only of universal demoralization, but actually of becoming *extinct* among the nations of the earth.

The history of the Russians presents us with an additional instance of the folly of encouraging the sale of strong drink with a view to promote the revenue. Dr. Giles Fletcher, who, towards the end of the reign

of Queen Elizabeth, visited Russia in an official capacity, details the following among other means employed by the Czars, to raise supplies. "In every great town the emperor hath a drinking house, which he lets out for rent. Here labourers and artificers many times spend all from their wives and children. Some drink away every thing they wear about them, even to their very shirts inclusive, and then walk naked, all of which is done for the honour of the emperor: nor while they are thus drinking themselves naked, and starving their families, must any one call them away, because he would hurt the emperor's revenue."*

The history of Ireland, during the last century, forms another most lamentable example of the same awful evil. In the sixteenth century, the sale of alcohol was discountenanced as "a drink, nothing profitable to be daily drunken and used," by which "much corn, grain, and other things is consumed, spent, and wasted, to the great hindrance, cost, and damage of the poor inhabitants of the realm."† In the early part of the reign of William and Mary, an act was passed "for the encouragement of distillation," from a desire to benefit agriculture. The effects of this ill-judged measure soon became manifest in the deteriorated health and morals of the people, and a portion of the former act was repealed with a view to check the consumption of spirituous liquors. In the early part of the eighteenth century, however, through similar mistaken views of national weal, great encouragement again was given to the manufacture and sale of ardent spirits. The consequences of this short sighted and erroneous policy were manifest up to a recent period. The habit became national, and the country was cursed with every species of evil, moral and physical, which follows indulgence in strong drink.

It can scarcely be expected that a people will long continue virtuous, when not only the means of sensual indulgence are placed within their reach, but also inducements to it, are actually held out by the rulers of the land. A high authority has thus expressed his opinion on the system of licensing houses, for the vending of intoxicating liquors, and by that means increasing the facilities for their sale. "I am aware of the law, but am decidedly hostile to the revenue acting upon it; *the interest of which is, to facilitate the sale of spirits under proper regulations.*"‡

The public expressions of a late Chancellor of the Exchequer, still more strongly exhibit the dangerous notions of legislators in this respect. This minister, in his speech of

* Of the Russ Commonwealth. London. 1592.

† 3rd and 4th Philip and Mary.

‡ Letter from C. S. Hawthorn, Esq., Chief Commissioner of Excise, to J. McCullum, Esq., Inspector in Cork. 1819,

1836, in stating the intention of Government to take off the extra duty laid upon spirit licenses during the last Session, estimated, to use his own expressive words, upon making up the loss to the revenue by the “*increased consumption which would thereby be produced.*”* The cool and calculating spirit in which this declaration was made, cannot be too deeply deplored. The welfare of the people ought to be the end of all good Governments. The value of the revenue is truly insignificant when compared with the virtuous habits of the people, on which the stability of all Governments principally depends.

The Australian, a newspaper published at Sydney, New South Wales, states that “distillation originally was permitted in that colony to encourage agriculture.” The result, according to a recent writer, was as follows: in a district where at one time not a single grain of corn was cultivated, there was a demand for fifty thousand bushels, “for the mere annual consumption of *one* of our distilleries:” from two of which issue “several hundred thousand gallons annually of a pure spirit from our barley and maize, and thirteen breweries, producing yearly eight thousand hogsheads of ale and beer.” This writer then seriously exclaims: “We cannot but be proud of the energies displayed by our enterprising community.”† The effect of this enterprize, fostered as it is by a paternal government, may be estimated by the fact that in Sydney and its neighbourhood there are instituted six separate courts of quarter sessions, and eleven distinct benches of magistrates. The cost of this colony to the British nation has been in exact proportion. According to Mr. Wentworth, the total expense of the colony from 1788 to 1797 was £86,435 per annum; from 1798 to 1811, £116,709 per annum; from 1812 to 1815, it increased to £198,456 per annum;

in 1816, it was £193,775; and in 1817, it was £229,152.‡ In the year 1836-7, the cost of this colony was £250,480. The government of this country could not anticipate any other result from the encouragement given to this iniquitous traffic, than expense, disorder, immorality, and irreligion.

In 1803, the recorder of Dublin, in his examination before the Privy Council, (after the partial insurrection which took place that year,) made some remark on the consequences of the excessive use of spirituous liquors. Its importance to the revenue was urged, “*Of what use,*” he replied, “*is that revenue, if it produces an insurrection every twenty or thirty years.*”

II. *Extent of intemperance, with some statistical information on the same.*—The extent of intemperance in various important portions of the globe has been entered into in a previous section. Some additional facts will very appropriately precede the startling statements about to be made.

The consumption of spirits and wines in the years 1820, 1830, and 1837, was as follows:—

	1820	1830	1837
Spirits	12,894,985	27,726,859	28,943,103
Wines	4,586,485	6,434,445	6,391,560

The quantities in each country, upon which consumption duties were paid in 1837, were as follows:—

	Population.	Gallons.
England	13,000,000	11,423,063
Scotland	2,500,000	6,245,026
Ireland	8,000,000	11,275,014

The following tables will exhibit the quantities of malt made, and its consumption by brewers, together with the number of places appropriated for the sale of malt liquors in the United Kingdom.

MALT.

Total Number of Quarters of MALT made between 5th January, 1838, and 5th January, 1839, in the United Kingdom.

	YEAR ENDED 5th JANUARY, 1839.			
	Quarters of Malt made.	Quarters of Malt used.		Total.
		By Brewers and Victuallers.	By Retail Brewers.	
England	4,227,998	3,193,776	465,243	3,659,019
Scotland	552,392	139,627		139,627
Ireland	282,805	241,748		241,748
The United Kingdom .	5,063,195	3,575,151	465,243	4,040,394

* The Chancellor of the Exchequer's Speech, May 6th, 1836.

† Two years in New South Wales, by P. Cunningham, Surgeon, R. N.

‡ Description of New South Wales, by W. C. Wentworth, 1819.

BREWERS, VICTUALLERS, &c.

Number of Persons in the United Kingdom licensed as “ BREWERS,” “ VICTUALLERS,” “ to sell Beer to be Drunk on the Premises,” and “ to sell Beer not to be Drunk on the Premises.”

	Number of				Number who brew their own Beer.		
	Brewers.	Victuallers.	Persons licensed to sell Beer.		Victuallers.	Persons licensed to sell Beer.	
			To be drunk on the Pre-mises.	Not to be drunk on the Pre-mises.		To be drunk on the Pre-mises.	Not to be drunk on the Pre-mises.
England	2,310	56,301	39,865	5,852	26,919	16,180	1,384
Scotland	217	16,989			285		
Ireland	243						
United Kingdom	2,770	73,290	39,865	5,852	27,204	16,180	1,384

The following estimate, prepared from an average of the able table of Professor Brande, will show the gross amount of alcohol contained in the various kinds of intoxicating liquors consumed in this kingdom.

	Gallons.
If we allow the average of alcohol contained in fermented liquors to be six per cent. the quantity of pure spirit, drunk in the form of <i>ale</i> and <i>porter</i> , will be about	25,380,000
In <i>spirits</i> , allowing the average to be fifty per cent.	12,963,080
In <i>wine</i> , allowing the average to be twenty per cent.	1,193,108
The quantity of alcohol in <i>cider</i> , <i>perry</i> , and <i>home-made wines</i> , it is supposed will exceed . . .	2,000,000
Total	41,536,188

In addition to this enormous consumption of alcohol, we must include a large additional amount as the result of the very extensive smuggling, which takes place in some districts in particular. If we estimate this at five millions of gallons, we shall have a *gross total consumption of forty-six millions of gallons of pure alcohol*. It is well known that alcohol is nearly double the strength of proof spirit, and thus taking into account the large quantity of ardent spirits and wines illicitly prepared, the consumption of proof spirit will not be much less than one hundred millions of gallons.

If we estimate the population at twenty-three millions, the result will be *an annual consumption of not less than four gallons of proof spirit, or deadly poison, by every man, woman, and child*.

If we deduct from this calculation a vast number of children, also persons who abstain altogether from inebriating liquors, and those who indulge in them to a very moderate extent only, we shall have a fearful view of the extent of intemperance in this country. A large proportion of our adult population indeed will be found to be free drinkers, if not frequent or habitual drunkards.

The title which this empire has to the appellation of a “ wine bibbing nation,” may be estimated by the following fact. In 1835 a return was made of the quantity of wine exported from Oporto, which amounted to 38,469 pipes. The people of Great Britain alone took 23,537 pipes. The great proportion of this wine would of course be consumed by the higher classes of society. That description of wine which is consumed by the operative portions of the community, is a vile compound of impure spirit and noxious and filthy drugs.

If we estimate the population of Scotland in 1830, at two millions and a half, at the usual average of five to each family, it will give 500,000 families. Dividing the amount consumed in Scotland amongst these, there will be ten gallons a year to each family, or nearly two and a half glasses of ardent spirits on an average, consumed in every family in Scotland every day in the year. Suppose these five millions of gallons are retailed at a price not averaging more than 10s. per gallon, then Scotland pays a tax of two millions five hundred thousand pounds sterling per annum, for what produces every species of disorder, immorality and crime.*

* Glasgow and West of Scotland Temp. Soc. Report 1830. p. 12.

The amount of spirits consumed in Scotland in 1831, was about 5,653,000 gallons. Deduct from the gross amount of population, children and young persons under fourteen or fifteen years of age, (which, according to Cleland's Statistics of Glasgow, form nearly two-fifths of the entire population,) also a pretty large proportion who never use ardent spirits, except on rare occasions, and the members of the Temperance Societies with a considerable proportion of their families, and it is evident that you reduce the consumers to at least about one-third part of the whole population.

The Committee of the Scottish Temperance Society in their Annual Report for 1831, state that they have before them a list of about 100 towns, villages, and parishes, in different parts of the country of which they have the correct population returns, together with the number of individuals licensed to sell ardent spirits in each; they ascertained that the population of the whole was about 765,000, and the licenses 8230, which gives an average of one license to every ninety-five individuals, or one for every nineteen or twenty families. Leaving out a few of the larger towns, where the number of retailers is greater in proportion than in the country parishes, the average will be one for every 113 individuals, or for every twenty-three or twenty-four families.* Thus if the above account be assumed as a correct representation of the whole nation, every twentieth family is supported by the remaining nineteen, to retail poison, and to spread disease, crime, and desolation, on every hand. The Statistics of Dr. Cleland show, that *in the city of Glasgow, there is one retailer of spirits to every twelve families.*

During the year 1829, 9636 commitments were made at the several offices of police in the city and suburbs, or twenty-seven persons, on an average, were brought to the offices every day in the year for being drunk and disorderly, many of these doubtless the same individuals, but at different periods. These, however, were but a fractional part of the intemperate drinkers—merely such as disturbed the public peace by their obstreperous revelry. At that period there were in the city and suburbs, somewhere about 1880 licensed places for retailing ardent spirits. A number of persons in a state of intoxication issued from a very large proportion of these places every day. On the supposition, however, that one half, that is 940, by their sales, produce a single case of intoxication every day, (and in this calculation is included all that is sold to be drunk by persons in their own houses,) we have the appalling amount of 343,000 cases of intemperance in a year. This statement does not suppose that there are so many different persons who became intoxicated, but that the crime of intemperance is com-

mitted 343,000 times during the period of a single year, in Glasgow alone.*

In 1827, the gin consumed in Great Britain, amounted to twelve millions of gallons; in 1829, the consumption of this pernicious poison (the chief part of it in England,) was twenty-four millions of gallons. It is stated that this quantity would make a river of gin sixty feet wide, three feet deep, and very nearly five miles long.

The Educational Magazine, not long ago, informed its readers that there were in London upwards of 100,000 confirmed dram-drinkers, who, on an average, drink two glasses of spirit each day. Calculating these at $1\frac{1}{2}d.$ per glass, the daily cost would be £1,250, which annually amounts to the large sum of £456,250.

A few years ago, it was estimated that the money expended in gin and whiskey for the previous twenty years, amounted to no less a sum than £400,000,000.

These calculations might be extended to a considerable extent. Those already adduced are, however, sufficient for the present purpose. Perhaps no more conclusive evidence of the existence and extent of intemperance in this country could be given, than the number of houses appropriated to the sale of inebriating liquors compared with the houses in which are sold provisions and other necessary articles of life. A few calculations of this kind are now adduced.

London.—In 1836, there were in the metropolis,

Hotels.....	207
Taverns	447
Public-houses and beer-shops	5975
Gin-palaces.....	8649
Brewers	200
	<hr/>
	15,478

Of all other trades, there were only 15,839, of whom were

Physicians	300
Chemists	580
Surgeons	1180
Notaries.....	130
Lawyers.....	1150
And only 2100 bakers and 1800 butchers.	

In reference to this list, we may observe, that the demand for physicians, surgeons, chemists, and lawyers, is to a great extent caused by the use of strong drink, so that a cessation of the traffic would necessarily issue in a removal of the chief sources of their professional emolument.

The following estimate is taken from the Annual Report of the Stamford Street and New Cut Branch of the South London Auxiliary Temperance Society. It is more specific in its details.

* Annual Report, &c., 1831. p. 15.

* Glasgow and West of Scotland Temp. Soc. Report, 1830. p. 11,

STATISTICS OF THE BRANCH.

The extent of this branch is less than half a mile square, and contains of roads, streets, and places	248
Number of houses from two rooms each to twenty	5632
Number of persons residing in the branch, male and female, including children	45,005
Number of confirmed, habitual, and occasional drunkards in the branch, known	1125
Number of houses of ill fame at present	261
130 of which contain not less than four prostitutes in each	520
131 of which contain two on the average, which is	262
Total number of prostitutes in the branch	782
And at which houses above £400 is spent weekly in alcoholic drinks.	
Number of taverns and hotels	3
Public-houses or licensed victuallers	40
Gin-shops	24
Beer-shops	51
Total number of drunkeries in branch	118
Wholesale brewers	2
Retail	1
Ale stores	3
Manufactories of British wines	1
Dealers in ditto	3
Maltsters	1
Dealers in malt	3
TEMPERANCE DEALERS, &c.	
Bakers	57
Butchers	43
Grocers and tea dealers, including all who are licensed to sell tea and coffee	73
Cheesemongers	22
Fishmongers	14
Poulterers	1
Greengrocers and fruiterers	68
Pastry cooks	9
Corn-chandlers	9
Millers	1
Oil shops	23
Linen-drapers	27
Temperance coffee-houses, the keepers of which are signed members of the Total Abstinence Society	6
Other coffee-houses	27
Number of eating-houses	20
Number of surgeons in this branch	30
Chemists	11
Pawnbrokers	11
Ministers of the gospel of the Established Church	3
Others	4
Total	7
Places of worship, churches	2
Dissenting chapels	7
Total	9

Accommodation for people to attend divine worship	7400
Leaving without room to attend the means of grace	37,686
Schools, on the British system	3
National, infant, Sunday schools, a total number	9
With room for, at present	2106

The next calculations include Glasgow, Birmingham, and St. Helier's, Jersey.

Dr. Cleland, in his Statistics of Glasgow, informs us, that in the city and suburbs, there are 2913 persons employed as brewers, distillers, and wholesale and retail dealers, to which may be added a proportion of 716 persons, who are designated as "waiters in taverns, post-boys, hostlers, and grooms."	
There are engaged as bakers, confectioners, &c.	1063
Fleshers, fishmongers, and poulterers	426
Grocers and victuallers	1127
Gardeners, fruiterers, &c.	499

Making a total of

3055
So that it will be found that an equal number of persons are employed in Glasgow in brewing, and distilling, and retailing liquors, as are occupied in all the other trades for the supply of good and nutritious food.

The Birmingham Temperance Society exhibit in their late Annual Report, "the sorrowful disproportion of persons engaged in the sale of intoxicating liquors, (in that town) and those engaged in the sale of wholesome and necessary provisions."

Wholesale dealers in wine, spirits, porter, ale, cider, &c.	38
Hotels, inns, and public-houses ..	380
Dram-shops	71
Beer-shops	479
	968
Bacon, corn, and flour dealers ..	196
Cheese, butter, and bacon dealers	109
Grocers	160
Butchers	300
	765

The drinking habits of the people of the large towns at least, in Jersey, may be estimated by the following recent calculation:—

The population of St. Helier's about 21,000.	
Inns and hotels	14
Taverns and public-houses	84
Wine and spirit merchants	8
Grocers and spirit dealers	71
	177
Bakers and confectioners	38
Butchers	24
Corn merchants and millers	4
	66

A resident in that place may well observe, that the consequences of such a state of things there, as elsewhere, is "ruin, temporal and eternal, to thousands!"

In succeeding portions of this section, the existence and extent of intemperance will be exhibited in various ways, both in reference

to the moral, social and physical condition of mankind.

Judge Cranch estimates the annual consumption of spirituous liquors in America, at 72,000,000 gallons. This proportion he supposes thus to be distributed among the people of the United States.

The women and children under sixteen years of age, according to the census of 1810 and 1820, constituted three-fourths of the whole population of the United States.

It can hardly be supposed, remarks Judge Cranch, that any considerable quantity of ardent spirits is drunk by children, and it is to be hoped, a very small proportion by the women. We will suppose, however, that the women and children consume one-sixth of the whole quantity; say 12,000,000 gallons.

Of the men over sixteen years of age, constituting one-fourth of the whole population, one-half, probably, consists of those who wholly abstain, and of those who do not drink habitually, and who may therefore average half a gill a day; one-eighth of 12,000,000 is 1,500,000 persons, at half a gill a day, equal to 8,554,687½ gallons.

One-half of the residue of the men, being one-sixteenth of the whole population, equal to 750,000 persons, may be habitual temperate drinkers, averaging three-half gills a day, amounting to 12,832,031¼ gallons; one-half of the remaining men, being one-thirty-second of the whole population, equal to 375,000 persons, may be regular toppers, and occasional drunkards, who average three gills a day, equal to 12,832,031 gallons.

Population.		Gallons.
9,000,000	Consume.	12,000,000
1,500,009	„	8,554,687½
750,000	„	12,832,031¼
375,000	„	12,832,031¼
<hr/>		<hr/>
11,625,000	„	46,218,750
375,000	„	25,781,250
<hr/>		<hr/>
12,000,000		72,000,000

These quantities added, make 46,218,750 gallons, which, deducted from the whole quantity consumed, 72,000,000 gallons, will leave 25,781,250 gallons to be divided annually among the 375,000 remaining men, who will average more than six gills a day, and who will, of course, be confirmed drunkards.

This estimate supposes that one in every sixteen is an habitual temperate drinker, that one in every thirty-two is a regular tipler and occasional drunkard, and that one in thirty-two also is a confirmed drunkard.

The whole of this immense quantity was consumed previous to the year 1828, when the influence of temperance operations began generally to be experienced.

III. *Evils resulting to national industry and wealth from intemperance.* The consideration of this important subject leads

to a general inquiry into the real sources of national prosperity. The accumulation of what is called *wealth*, certainly does not constitute national prosperity. *Industry* and *health*, are essential to the acquisition of riches. These qualifications moreover, are, in a great degree, dependent on a certain amount of *knowledge* or *skill*. In addition to which, mankind are endowed with feelings termed *motives*, which spur them on in their various enterprises. National prosperity also more or less depends on other causes which may subsequently come under our consideration, among which we may include *security of property*, when acquired, and the possession of individual and national *freedom*. All of these exercise greater or less degree of influence on the prosperity and happiness of nations, and form an interesting as well as important subject of investigation.

1. *Loss of disposition for industry—loss of time and labour—capital, and employment.*—Intemperance has ever been ruinous in its consequences to national industry. Idleness and poverty are the uniform concomitants of free indulgence in the use of intoxicating liquors. “Drunkenness,” says Dr. Johnson, “is the parent of idleness; for no man can apply himself to the business of his trade, either while he is drinking, or when he is drunk. Part of his time is spent in jollity, and part in imbecility; when he is amidst his companions, he is too gay to think of the consequences of neglecting his employment, and when he has overburdened his stomach with liquor, he is too feeble and too stupid to follow it. Poverty is the offspring of idleness, as idleness of drunkenness; the drunkard’s work is little, and his expenses are great, and therefore he must soon see his family distressed, and his substance reduced to nothing.”*

One of the injurious effects of intemperance, according to the Report of the Committee of the House of Commons, which held its sittings during the year 1834, is “*extinction of DISPOSITION for practising any useful art or industrious occupation.*” Such indeed will be found to be the universal tendency of this vice. Those who indulge in strong drink, have little inclination, or even capacity, for improvement. Selfishness and apathy predominate in the character of the drunkard, and feelings of amendment, however frequently they may arise, are quickly dissipated in the love of sensual gratification.

Loss of *time* is another lamentable result of indulgence in intoxicating liquors. It is impossible to estimate the amount and value of this loss. Time is the means by which labour can be accomplished, and money earned, and is therefore the loss of labour and of wealth. If it were possible to calculate the *value* of all the loss of time thus

* Johnson’s Debates, 1742-3.

occasioned, there is reason to believe that it would amount to a sum sufficient to prevent much, if not the whole of the poverty which at present exists in the land.

Loss of *labour* is a natural consequence of the vice of intemperance. Wealth has been said, by an eminent writer, to consist of all that man desires as useful or delightful to him.* Labour is especially the property of the working man; everything, therefore, which injures this property, must very greatly impair the condition of the working classes. Intemperance not only causes positive loss of time, but induces physical debility, and renders its victims unfit for active and continued exertion. "The loss of productive labour, in every department of occupation, through intemperance, is equal to one day in six throughout the kingdom, or to £1,000,000 sterling out of every six that are produced," this, however, appears to be a small portion only of the actual loss which the nation sustains from the use of intoxicating liquors, an amount, which, from a moderate calculation, "may be fairly estimated at little short of £50,000,000 sterling per annum."†

The following calculations are made by Judge Cranch, of America. In 1830, there were in the United States, 375,000 habitual drunkards. These, upon an average, did not earn more than two-thirds as much as if they had been sober. This annual loss of 100 days labour of each drunkard, in his sober state, worth at least forty cents a day, makes an annual loss of 15,000,000 of dollars. The same individual estimates that of the habitual drunkards, one in ten annually comes to a premature death, and that their term of life is, upon an average, shortened ten years. 37,500, therefore of the 375,000 habitual drunkards, die annually from the use of strong drink. Ten years labour of each of them is thus lost to the country. On a reasonable calculation, observes Judge Cranch, each of them, if sober, might have earned, upon an average, fifty dollars a year more than the cost of his support. The loss of ten years labour of 37,500 men, at fifty dollars per annum, is an annual loss of 18,750,000 dollars.

Professor Hitchcock estimates this loss, at from 30,000,000 to 50,000,000 of dollars.‡

An accurate writer, about the commencement of the present century, estimated the quantity of beer, porter, gin, and compounds, then sold in public-houses in the metropolis and its environs, at nearly £3,300,000 per annum; an amount which he justly observes to be equal to double the revenue of some of the kingdoms and states of Europe, independent of the other evil consequences

which result from intemperance. On a supposition, he further remarks, that the excesses in which perhaps 200,000 of the labouring classes in the metropolis indulge, shortens the natural period of their existence only five years each, on an average, the labour of one million of years is lost in the lives of this class of men, after the expense is incurred in rearing them to maturity; which, during a period of thirty-six years of adult labour, at £25 a year, establishes a deficiency to the community of *twenty-five millions sterling*.* This calculation does not include the numerous other train of evils, which arise to a nation from *idle, dissolute, and immoral* habits, as well as the immense actual expense incurred in the repression of crime, and from other countless sources originating in, and fostered by, the use of strong drink.

Loss of *capital* is another result of intemperance. Capital, or rather money, is the proceeds or fruit of labour. "Labour was the first price, the original purchase-money which was paid for all things; it was neither by gold, nor by silver, but by labour, that all the wealth of the world was originally purchased."† Labour procures wealth, but economy increases it.

Capital is that by which mankind lay the foundation of additional wealth. The use of intoxicating liquors, with few exceptions, prevents the accumulation of capital. To the poor man in particular capital is to be desired, as a means of elevating his condition in life. If the drunkard has at times an inclination to increase his worldly possessions, his general improvidence deprives him of those advantages which he would otherwise possess.

The improvidence of the English operative in the beginning of the eighteenth century, is thus described by De Foe. "They are the most *lazy-diligent* nation in the world. There is nothing more frequent than for an Englishman to work till he has got his pockets full of money, and then to go and be idle, or perhaps drink, till it is all gone. I once paid six or seven men together on a Saturday night, the least ten shillings, and some thirty shillings, for work, and have seen them go with it directly to the ale-house, be there till Monday, spend it every penny, and run in debt to boot, though all of them had wives and children. From hence comes poverty, parish charges, and beggary."

The same writer in his "True Born Englishman," in relation to the "labouring poor," whom he represents as "lavish of their *money* and their *time*," says,

In English ale their dear enjoyment lies,
For which they'll starve themselves and families.

* Lord Lauderdale's Inquiry into the Nature and Origin of Public Wealth, ch. ii.

† Parliamentary Report, pp. 5. 6.

‡ Lectures on Diet, Regimen, and Employment. By Ed. Hitchcock, Prof. of Chem. and Nat. Hist., Amherst College.

* Colquhoun's Treatise on the Police of the Metropolis, 6th Edit. 1800.

† Smith's "Wealth of Nations."

Again, he remarks that the same class

Subject all their labour to the pots,

and further affirms that,

The greatest artists are the greatest sots.

He goes on to say,

Good drunken company is their delight,

And what they get by day they spend by night.

This description is equally applicable in the present day.

Loss of *employment* is a common effect of intemperate habits, and operates in various ways in producing national poverty and distress. Crime is the frequent result of poverty, occasioned by intemperance. In a vitiated state of the morals, the means of enjoyment are too generally attained by unlawful expedients.

The loss of *skill* and *intellect* will subsequently be taken into consideration as materially influencing national welfare. All of these causes, not to mention others of minor importance, are mutually connected and inseparable in their general results.

The past and present experience of nations, fully testifies the correctness of the facts and views here advanced.

2. *General state of poverty through intemperance.*—The connexion between *poverty* and intemperance is a subject which demands careful and serious consideration. The records of all countries, where intoxicating liquors have been used, are prolific in instructive illustrations. The condition of the inhabitants of Siberia forms a striking instance. The city of Tomsk has a population of about 11,000, and is thus described by a recent traveller: "With few exceptions, the city is very mean, and the inhabitants wretchedly poor; the natural indolence of the people, and their being greatly *addicted to drunkenness*, tending, of course, to increase the evil; for every sensible man knows, that strong drink, instead of drowning the ills of life, only adds to them, and is in itself the greatest evil of all, because it leads to so many others. Throughout every part of Siberia, the evil is prevalent, but in Tomsk it is carried to the greatest excess, a considerable quantity of spirituous liquors being made in the neighbourhood, and forming one of the principal articles of commerce. Though greatly fatigued, and in need of rest, the wretchedness of the place made us glad to pursue our dreary journey."*

Dr. Pococke makes a similar observation on the Island of Samos, in Greece, "The people in Samos are much given to revelling and drunkenness, and are very poor."†

Similar illustrations might be multiplied, almost to any extent: so universally will it be found, that *poverty and distress exist in all nations, in proportion to the facilities*

afforded for the sale and consumption of intoxicating liquors.

An individual of considerable experience remarks, that if the Government of Great Britain knew, or had materials to calculate the loss which the *general revenue* of the state suffers, by the comparatively small sums produced by licenses, they would raise the annual sum so high, as to shut up half the public-houses now open in the kingdom. The difference, he further remarks, between parishes abounding with ale-houses, and those which have none, is great to an incalculable amount, in point of industry, moral conduct, sobriety, attendance on divine service, above all, family comfort, and eventually of population; and, as a consequence of the whole, of habitual contentment, submission, and attachment to the government under which they live. It is, concludes this writer, an observation which has been repeated to me in every part of the kingdom, and such variety of instances have been given, all tending to the same result, that the fact is established beyond controversy—*multiplied ale-houses are multiplied temptations*.*

These facts and conclusions are not confined to a town or a nation, but are the results of general investigation. Oliver Goldsmith states the following to be the result of his own widely extended experience: "In all the towns and countries I have seen, I never saw a city or village yet, whose miseries were not in proportion to the number of its public-houses. In Rotterdam, you may go through eight or ten streets without finding a public-house; in Antwerp, almost every second house seems an ale-house. In the one city, all wears the appearance of happiness and warm affluence; in the other, the young fellows walk about the street in shabby finery, their fathers sit at the door darning and knitting stockings, while their ports are filled with dung hills."

Uncleanliness and filth invariably accompany the poverty which results from intemperance; hence arise other injurious consequence affecting the health and comfort of the inhabitants. The "*good old times*" of England have been eulogised for the superior advantages which they are supposed to have afforded to the poor; but we have already seen that the habits of our ancestors were characterized by more or less intemperance, the effects of which were displayed in general poverty and distress. In the third of Henry VIII. c. 8, it is remarked that "Most cities, boroughs, and towns corporate, had fallen into decay, and were no longer inhabited by merchants and men of substance, but principally by *brewers, vintners, fishmongers, and other victuallers*." The

* Travels in Asia, by Captain Blisset, R.N., p. 124.

† Pococke's Travels, vol. ii. p. 29, folio edition.

* Inquiry into the State of the Lower Classes, in a Letter to William Wilberforce, Esq., M.P., by Arthur Young, F.R.S., Dublin, 1798, p. 30.

poor were badly clothed, resided in miserable hovels, and principally lived on rye or oat bread; and Harrison affirms, that 72,000 great and petty thieves were put to death during that reign.

Whether reference be made to ancient or to modern times, the same alarming consequences of intemperance are found to exist, and these in exact proportion to the consumption of intoxicating liquors. The condition of some of the inhabitants of the South Sea Islands, as recently described by a philanthropic member of the Society of Friends, forms an example in point. "The Island of Bolabola, is one that has suffered most of any, by the introduction of spirits, as it has caused the people to distil their bread-fruit, and every kind of food capable of producing spirit. *I can never forget the abject wretched state of these people, with scarcely rags to cover them, in want of everything, and nothing to purchase with: everything consumed in buying or converting into spirits; and the famished appearance of the more than half naked children who abound, will long retain a place in my memory, in that love which must ever intercede on behalf, and plead the cause of suffering humanity.*"*

The effects of intemperance in producing national poverty, are fearfully illustrated in the history of Ireland. That country is peculiarly favoured in regard to situation, climate, soil, and every other circumstance necessary for attaining national prosperity. Ireland, however, not long ago, exhibited more poverty, and more abject misery of every description, than any other similarly circumstanced nation in the world. The surprise which otherwise might be created by this statement will cease, when it is known that the people of Ireland annually consumed not less than 23,300,000 gallons of ardent spirits. At an average price of seven shillings per gallon, this amount would yield no less than £8,000,000. The pauperism of Ireland, says a writer in a well-known periodical, affords to pay about eight millions sterling for whiskey, not a drop of which they require, but every drop of which they swallow.†

From the third Report of the Commissioners of "Inquiry into the state of the Irish Poor," it appears, that there are in Ireland, not less than 585,000 men out of work, and therefore in distress, during thirty weeks of the year; and the number of women and children, aged and sick persons dependent on these, is estimated at 1,800,000, making a total of 2,385,000 persons dependent on charitable aid, or else on depredations upon their neighbour's property, for thirty weeks of the year. The greater part of this unparalleled poverty,

may be attributed to indulgence in spirituous liquors. It has been estimated, that the average expenditure of money on whiskey in Ireland, for the last ten years, amounts to no less a sum than £6,300,000; this sum would support during the year, 230,000 families, at the rate of one shilling and sixpence per day for each family. How much comfort and happiness would be secured by the people of that unfortunate part of the British empire, abstaining from so pernicious a poison!

The amount of money consumed in ardent spirits in Ireland, says Judge Crampton, would in six years pay its national debt; and at the rate of one shilling and sixpence per day, would give full employment to 136,000 families. The Mendicity Society of Dublin, cost for its support but a pittance of £8,000 a year, and still so much could not be procured to keep its doors open for the reception of its wretched inmates; but the people did not reflect that they spent five million pounds sterling a year in whiskey. In a street in Dublin, only containing what might be called 120 solvent houses, there were seventy-three selling spirits.*

Of late years, many very interesting statistical facts have been collected, concerning the effects of intoxicating liquors in producing national property. At a moderate calculation, it appears, that at least three-fourths of the poverty existing in our nation, arises from this fruitful source of indigence and distress. It is indeed a matter of deep regret, that so large an amount of distress should be produced by the use of an article purely luxurious in its nature. Such, however, is the delusion under which mankind labour, that an evil which has ever afflicted human beings in the direst form, is not only voluntarily allowed to exist to an unlimited extent, but its use is absolutely fostered and encouraged in the most effectual manner.

The following facts will exhibit the influence of intemperance in the production of poverty. Mr. Mott, contractor for the management of the poor in Lambeth, and several other parishes, investigated the causes of pauperism, and in particular such cases that came under his care. His observations especially extended to 300 cases. "The enquiry," says Mr. Mott, "was conducted for some months, as I investigated every new case that came under my knowledge, and I found in nine cases out of ten, the main cause was the ungovernable inclination for fermented liquors."†

Edwin Chadwick, Esq., Barrister, and one of her Majesty's Commissioners for inquiry into the operation of the Poor Laws, makes the following statement. "My enquiries have extended throughout the metropolis, through a considerable proportion of the Counties of Berks, Sussex, Hertford, Kent, and Surrey, and the agricultural

* Letters and Journals of Daniel Wheeler, during a Visit to the South Sea Islands.

† Blackwood's Magazine. July, 1837.

* Saunders' News Letter, Oct. 21, 1830.

† Parliamentary Evidence, p. 29.

parishes adjacent to the metropolis. I believe that all the witnesses of considerable practical experience, when questioned as to the causes of pauperism, stated to me that the ungovernable inclination for fermented liquors, was one very considerable contributory cause.”*

John Twells, Esq., of Highbury, states, respecting that parish, that in his opinion, nineteen out of twenty of the inmates of workhouses, get there from either habits of drunkenness of their own or their connexions. Out of twenty-six inmates of a workhouse in Birmingham, twenty-four were addicted to habits of drunkenness, and obliged to be debarred from occasionally visiting their friends.†

The master of a workhouse, in the East of London, in writing to a friend, about the year 1831, states, there were 145 cases in the house at that time, 111 of which he could clearly trace had been brought there from habits of intemperance and spirit drinking.‡

Of twenty-eight applicants for admission to an asylum for old decayed men, twenty acknowledged themselves to have been intemperate, seven had been by their own account moderate drinkers, one had been strictly sober.||

Of 27,247 objects relieved in 1829, by the Sick and Destitute Room Keeper’s Society, it is believed by the managers, that one half had been reduced from comfortable circumstances, to extreme want by distilled spirits.§

Of 143 inmates in one London parish workhouse, 105 were found to have been reduced to that state by habits of intemperance. They comprised the blind, epileptic, idiotic, and aged poor, some of whom, if opportunity permitted, would indulge in habits of inebriation.

Such is the ungovernable passion of the habitual drunkard, that every thing is sacrificed, even bread itself, to obtain drink. The statements of parish officers prove that drunkenness not only leads to the most distressing poverty, but that much of the relief afforded to out-door paupers, is spent in procuring strong drink. An officer of St. George’s parish, Southwark, stationed persons to make the enquiry, the result of which was, “that £30 out of every £100 of the money given as out-door relief, was spent in the gin-shop during the same day. Another gentleman, from Aldgate parish, states a similar fact. After relieving the poor, they frequently found them in groups at the adjacent gin-shops, and females, not unfrequently, apply for relief in a state of intoxication.¶

Mr. Huish, overseer, St. George’s, Southwark, states, as the result of actual investiga-

tion, that £30 out of every £100 of the money given as out-door relief, was spent in the gin-shop during the same day.

Mr. Millar, assistant overseer of the parish of St. Sepulchre, London, states, “By far the greater proportion of our new paupers, are persons brought upon the parish by habits of intemperance. After relief has been received at our board, a great proportion of them proceed with the money to the palaces or gin-shops which abound in the neighbourhood.”*

Some of the clauses of the late Poor Law enactment, by which out-door relief has been restricted in this country, have removed the evils alluded to in the above statements.

These instances might be multiplied almost to any extent. In Dublin we find the same practice common. Dr. Adams, of Dublin, in serving out the soup to the poor, in the parish of St. Peter’s, asked the applicants whether they had tasted spirits that day. Eighteen out of the first twenty acknowledged that they had bought and drank drams that morning, the price of the dram probably being more in value than the soup they had come to beg. When preparations were made against the approaching cholera in Dublin, in the same (St. Peter’s) district, 160 straw beds were given out in one day. A gentleman had the curiosity to examine one lane where the beds had been given, and found that forty of them had been sold and converted into whiskey. Mr. Carr had known persons discharged from Cork Street Fever Hospital, in Dublin, presented with warm clothing, flannels, or bed coverings, such as blankets for the approaching winter, go and sell them for whiskey, and thus encounter the miseries of a severe winter for the so called enjoyment of a few hours intoxication.†

The 126 male and 133 female inmates of the Belfast poor-house, a short time since, (1834) were, while fit for labour, in the receipt of £144 weekly, from wages. Fifty-eight of them had 15s. 5½d. per week. The spirit-shop swallowed up no small proportion of their earnings, and prevented prudent savings.‡

Volumes might be filled with similar illustrations.

In America the same fruitful cause of intemperance operates to an equally fearful extent. A few pointed examples are now adduced.

Albany, New York.—G. W. Welch, Esq., superintendent of the alms-house, in Albany, New York, states, that there were, in 1833, received into the alms-house, 634 persons; viz.,

Not intemperate	1
Doubtful	17
Intemperate	616

There were also in the house, on the first of January, 297; making in all 931. One

* Parliamentary Evidence, p. 29. † Ibid. p. 300.

‡ Ibid. p. 391. || Ibid. p. 426. § Ibid. p. 426.

¶ Ibid. p. 30.

* Ibid. p. 30. † Ibid. p. 255. ‡ Ibid. p. 426.

half that proportion, throughout the United States, would make more than 200,000.*

New York City.—Mr. Guion, clerk of the alms-house in New York, states, that in addition to 5,179 persons supported in the alms-house of that city, there were relieved and supported out of the alms-house, 19,150; making in all, in that city, relieved or supported, 24,329: and that three-fourths of this was occasioned by intemperance. The Report then states, that one-fourth of that proportion, throughout the United States, would make more than 300,000; four-fifths of whose pauperism is occasioned by alcohol.† The alms-house in New York City, and the penitentiary connected with it, has about 2000 inmates, constantly at the annual cost of about 100,000 dollars. The resident physician states, that “nearly all of them were addicted to intemperance.” A report made to the Legislature of New York, by the Secretary of State, in the year 1822, shows that there were then 6,896 permanent, and 22,111 temporary paupers, whose support cost that year 470,582 dollars.

Boston.—Mr. Stone, superintendent of the alms-house Boston, for the period of eight years, says, “I am of opinion, that seven eighths of the pauperism in this house, is to be attributed to intemperance.”‡

New Hampshire.—From a report made to the Legislature of this State, in 1821, it appears that the maintenance of the poor had cost them, from 1790 to 1820, 726,547 dollars.

Massachusetts.—In this State there were, about the same period, 700 paupers, whose support cost 360,000 dollars.

Philadelphia.—The superintendent of the alms-house in Philadelphia states, that the expense of supporting paupers in that institution, in 1833, was 130,000 dollars; and that ninety per cent. of the amount was occasioned by intemperance.||

The steward of the alms-house, Philadelphia, affirms that in 1835, there were 1243 paupers admitted into that establishment, and that eight out of ten of the adults were of intemperate habits; making 994 of the entire number.

The superintendent of the children's department, states it as her conviction from close observation, during a period of eleven years, that ninety out of every hundred children admitted, were the offspring of intemperate parents.

Other authentic documents state as follows, in relation to the same alms-house. The number of paupers received, In 1823, 4908; expenses, 144,557 dollars. In 1824, 5251; expenses, 198,000 dollars. In 1825, 4394; expenses, 201,000 dollars. In 1826, 4272; expenses, 129,383 dollars. Total in four years, 18,825; 662,940 dollars.

A great proportion of these unfortunate

inmates were brought to that state through indulgence in spirituous liquors.

Rockbridge County.—Captain E. Bryan, the keeper of the poor-house in Rockbridge County, states, that from forty to fifty men have been inmates of it during the last seven years, four-fifths of whom, in his opinion, were reduced to pauperism by the use of strong drink. During the same period, 150 women and children have been tenants of the poor-house, half of whom became pensioners on public charity by the intemperance of their parents or husbands. The annual cost to the county of the pauperism created by intemperance, he estimates at 900 dollars. Thus it would appear that these forty men and seventy-five women and children, have in seven years cost the temperate members of society in Rockbridge County, the sum of 6,300 dollars.

Baltimore.—In the year ending April, 1826, 759 persons were admitted into the alms-house. 554 of these were brought to this condition from the following causes.—Debility from intemperance, 235. Insanity from drunkenness, 54. Syphilis, 85. Each of whom were intemperate in their habits. Uleers resulting from the same cause, 34. Fractures and wounds, which in every case were received whilst the parties were in a state of intoxication, 28. Various diseases, all traced to drunkenness, 104. Crippled whilst in a state of intoxication, 7. Old age, all habitual drunkards, 7.

The Executive Committee of the American Temperance Society, not many years ago, ascertained from official documents, the numbers and cost of paupers in the cities of Baltimore and Philadelphia, as well as in the States of Massachusetts and New York, and by that means the whole number of paupers in the United States was found to be 200,000, and the cost of their support at 10,000,000 dollars. Three-fourths, that is to say, 7,500,000 dollars of this sum was set down to the score of intemperance. According to William's register, there were not long ago in the State of New York, 337 distilleries, consuming raw materials to the amount of 2,278,420 dollars, and manufacturies of liquors, valued at 3,098,042; and 94 breweries, consuming 916,252 bushels of grain, and producing beer valued at 1,381,446 dollars.

The poor's rates in England, not long ago, amounted to about £8,000,000. At least two-thirds of this sum originates in the use of strong drink, that is to say, £5,333,333. In the year 1834, the people of this country expended in spirits £21,874,000. In 1835, the expenditure for the same pernicious poisons, amounted to £23,397,000; an increase in one year of a million and a half. In 1836, a similar increase was found to have taken place, for in that year the amount was £24,710,000. The principal part of this money must have come from the hard earned wages of the poor, who, in large

* Eighth Report of American Temp. Society.

† Ibid. ‡ Ibid. || Ibid.

towns in particular, consume by far the greatest proportion of spirituous liquors; and this too in times of poverty and distress. Intoxicating liquors paralyze the sinews of industry, cloth their infatuated victims with rags, and cast them upon the commiseration and charity of the sober and industrious portions of society.

In the town of Birmingham, at a moderate calculation, there is annually expended in the purchase of alcoholic drinks, a sum sufficient to purchase bread for forty thousand families. In one moderately sized town in Yorkshire, the annual loss from the use of strong drink, is fairly calculated at £117,910; a sum which in eight years and half, amounts to no less than *upwards of one million pounds sterling*. In Brighton, it appears that the local taxes are less than one-sixth the sum annually expended in liquor. In the new statistical account of Scotland, it is stated, that in the parish of Stephenson, Ayrshire, the population of which is about 3681, the enormous sum of £4,125 is annually spent on ardent spirits. This amount is within a trifle of the whole rental of the parish. These, however, are but brief selections from volumes of facts, which might easily be adduced to illustrate this subject; the true source indeed of most of the poverty which prevails in our land. Contrast the state of our own poor with the condition of the inhabitants of countries where these liquors are not used to so free an extent. Strangely deluded indeed are those legislators, who view the revenue derived from the sale of intoxicating liquors as a source of national prosperity.

3. The *destruction of grain alone*, independently of the serious evils arising from intemperance, doubtless more than preponderates over any benefit derived from a system so manifestly immoral in its nature and tendency. The Report of the late Parliamentary Inquiry on Drunkenness, among other injurious results of the drinking system, includes, "The destruction of an immense amount of wholesome and nutritious grain, given by a bountiful Providence for the food of man, which is now converted by distillation into a poison;" and after looking to the acknowledged fact, that spirituous liquors "are always, in every case, and to the smallest extent, deleterious, pernicious, or destructive, according to the proportions in which they are taken into the system," the Report adds, "so that not only an immense amount of human food is destroyed, whilst thousands are inadequately fed; but this food is destroyed in such a manner as to injure greatly the agricultural producers themselves; for whose grain, but for this perverted and mistaken use of it, there would be more than twice the demand for the use of the now scantily fed people, who would then have healthy appetites to consume, and improved means to purchase nutriment for themselves and

children, in grain, as well as in all the other varied productions of the earth."*

It is, perhaps, not the least lamentable consequence of this system, that the substances employed in the preparation of intoxicating liquors are those which possess most nutriment or saccharine matter, and consequently form the staple articles of human subsistence. The beneficent and nutritious gifts of the Creator are by this means not only destroyed but converted into a poison, which saps the very foundations of society, and spreads ruin and desolation throughout the world. The juice of the grape, and the pomegranate, the sap of the palm-tree, and the milk of the cocoa-nut, when possessed of those natural properties with which providence has endowed them, impart health and strength. Man, however, interferes with the designs of providence, and seeks out new inventions whereby to gratify his depraved appetites. Lamentable are the consequences which result from his unwise and guilty conduct.

This investigation might be extended to every portion of the globe where intoxicating liquors are found. The juice of every description of nutritious plants, almost every species of healthful grain, the milk of numerous animals, and even the flesh of those animals is subjected to careful fermentation. Healthful food is changed by a tortuous process into a most deadly poison. This destructive waste of the bounty of providence was noticed from an early period. Domitian, for example, finding that the culture and rapid growth of vines obstructed very much the production of grain, forthwith commanded them to be destroyed. Charles IX., at a more recent period, adopted the same plan. Henry III. also was unwilling that the people should favour the cultivation of the vine, at the expense of wheat. The low price of wines in the years 1805 and 1806, augmented drunkenness so much, that the proprietors of their own accord were obliged to destroy the vines, which were worse than profitless.† At the present time the vineyards of France occupy five millions of acres of land, or a twenty-sixth part of the whole kingdom.

The Jesuit Parenmin attributes much of the misery and famine frequently endured in China to the great consumption of grain in the manufacture of spirits.‡ The Abbé Grosier, in his description of China, alludes in strong terms to the same prolific source of poverty and distress.¶ The Swedes consume above 400,000 tuns (a tun is rather less than our sack, or half-quarter) of grain in the distillation of spirits.¶ Need we then feel surprised that Sweden does not pro-

* Report from the Select Committee on Drunkenness, p. 5.

† Le Dictionnaire de Medical Science.

‡ Lettres Edif et Curieuses, Tome xxii. p. 184, Paris, 1780.

¶ Vol. 1., b. 4., c. 3., p. 396, 8 vo. Eng. transl.

¶ Malthus, on Population, vol. 1., p. 391.

duce sufficient food for its population. It appears from a calculation made from the year 1768 to 1772, this deficiency of grain amounts to 440,000 tuns, which has to be supplied from foreign countries.* Other countries greatly suffer from the same wicked perversion of God's gifts. "I was greatly surprised," remarks a recent traveller, "to find that Sweden would produce sufficient grain for the internal consumption of the inhabitants, if such large quantities were not employed in the distillation of malt spirits."†

Dr. Darwin, in reference to the distilleries, remarks with justice that "they take the bread from the people, and convert it into poison." Pennant, in his second tour in Scotland makes a similar observation. "Notwithstanding," he says, "the quantity of beer raised (in Cantyre), there is often a sort of dearth; the inhabitants being mad enough to convert their bread into poison, distilling annually six thousand bolls of grain into Whiskey."‡ Ratty correctly states "that the great scarcity of corn in Ireland and England, in 1757, was not owing entirely to a failure of the crop, but more to a consumption of the grain in the distilleries."|| Wise and reflecting men foresaw the result of this destructive system. Dr. Smyth, A.D. 1745, thus alludes to it: "In order to promote tillage, several gentlemen have of late encouraged the distillation of whiskey; but it may be doubted whether the use of this liquor by the common people may not in time contribute to the ruin of tillage, by proving a slow poison to the drinkers of it."§ Experience has but too powerfully demonstrated the truth of these remarks. The consumption of corn in Ireland was, according to authentic documents, about fifty-thousand barrels per week; the distilleries, however, only work for eight or nine months of the year—thus one million six hundred thousand barrels of nutritious grain were annually converted by this demoniacal process into poison.¶ Need the reader any longer express surprise at the destitution of the Irish people?

During the years 1809-10-13, and 1814, a partial interdiction was placed by the legislature on distillation in Ireland, in consequence of a scarcity of corn. Nevertheless, during the years 1809-13, according to returns made by the collectors of imports and exports, the value of export in oats alone in those years of scarcity and distress, amounted annually to upwards of £500,000 more than during the years 1807-11—that is

years of plenty—when no bar was placed upon distillation. The capital of the country, by this means, was increased no less than half a million per annum.

The value of the increase in export, however, did not by any means constitute the whole of the good effected by this partial prohibition to distillation. The value of the grain required for home consumption in consequence of the failure of the harvest, thus *saved from distillation*, must be taken into the account, which, but for that circumstance, would have been available for export. Calculations, decidedly below, rather than above the correct estimate, show that the saving to the country by this means, was, in the year ending 5th January, 1810, as compared with that ending 5th January, 1808, when no restraint was placed upon distillation, one million, two hundred and fifty-one thousand, three hundred and sixty-nine barrels, value £969,406; and by the same prohibition, in the year ending 5th January, 1814, as compared with that ending 1812, when the prohibition did not exist, one million, thirty-four thousand, six hundred and fifty-one, barrels of oats, value £838,466.* This calculation, however, does not include the entire gain to the nation by the prohibition in question. A vast quantity of coals are imported into Ireland for the purpose of distillation. The prohibition, at least, reduced the unnecessary imports £85,000, comparing the years ending 1808 and 1812, with those ending 1810 and 1814, and from £150,000, to £200,000 annually, if a comparison be made with the years† in which the prohibition was removed. From £10,000 to £15,000, it appears, has been expended in one year at a single distillery for the purchase of coals.

From official returns, we ascertain, (including the import of foreign spirits), that during the years 1810-14, the annual consumption of spirits in Ireland, as compared with the years 1808-12, was diminished from three to four million gallons. If we average the prices of spirits, foreign as well as Irish, so low as 10s. per gallon, the result will demonstrate *an annual saving of the wages of the people of from one and a half to two millions sterling*. This large sum, previously expended in the purchase of a poison, equally destructive to the temporal as well as the moral concerns of man, was either appropriated to the purchase of useful articles, or added to the capital employed in manufactures and trade.‡

The returns laid before Parliament, moreover, show that during the years of prohibition, the trade and manufactures of Ireland were increased. The export of goods, indeed, at that period, exceeded very much

* Mémoires du Royaume de Suède, table xvii. p. 174.

† Cox's Travels in Sweden, 1784, p. 310.

‡ Pinkerton, vol. iii, p. 269.

|| Nat. Hist. of the County of Dublin, by John Ratty, M.D., 1772, vol. ii., p. 411.

§ Ancient and Present State of Waterford, by Charles Smyth, M.D., p. 282.

¶ Parliamentary Register, vol. 22, pp. 859 708.

* Enquiry into the use of spirituous liquors, pp. 75. 80.

† Ibid, pp. 80-1.

‡ Ibid, p. 83.

the average export in years of prosperity and plenty: hence the stoppage of distillation was attended with increased national prosperity.* A careful and dispassionate investigation, indeed, of this subject, must bring us to the same conclusion as was arrived at by a well known writer on the manufactures of Ireland, that "the manufacture of spirits should be discouraged, for no evil that can result from its suppression, can equal those which its prosperity produces."† A clergyman on one occasion, with great propriety, designated whiskey as "*a beverage only fit for demons.*" Unhappy Ireland can well testify the truth of this strong expression in the disastrous consequences which have resulted from its use to the morals, industry, and welfare of her people.

Thus an alarming loss of wealth arises from the destruction of an immense quantity of nutritious grain in the manufacture of intoxicating liquors. It is ascertained, from official documents, that not less than forty-five or fifty millions of bushels of malt (about one-seventh of the grain produced in Britain) are annually consumed in this process, for the production of which, more than a million of acres of land is required. Hence, the nutritious produce of a million of acres of land, *is not only lost to the nation, but converted into a source of incalculable human misery and distress.* The immoral nature of this practice is thus adverted to by a celebrated moral philosopher:—"From reason or revelation, or from both together, it appears to be God Almighty's intention, that the productions of the earth should be applied to the sustentation of human life. Consequently, all waste and misapplication of these productions is contrary to the divine intention and will, and therefore wrong, for the same reason that any other crime is so: such as destroying, or suffering to perish, great part of an article of human provision, in order to enhance the price of the remainder; or diminishing the breed of animals, by a wanton or improvident consumption of the young. To this head may also be referred what is the same evil in a smaller way, the expending of human food on superfluous dogs or horses; and lastly, *the reducing the quantity, in order to alter the quality, and to alter it generally for the worse, as the distillation of spirits from bread-corn.*‡

But this direct loss does not include all which results from a system so injurious to the temporal and spiritual interests of man. Not only is so much valuable grain lost to the country, with the necessary introduction of evils consequent on its conversion into a deadly poison, but the land on which it was

grown is of no real utility to the nation. In this country about one million of acres of land are devoted to the growth of grain, all of which is destroyed by its conversion into an agent of intoxication. In addition to these, not less than fifty thousand of acres of land are devoted to the cultivation of hops, nearly all of which are used in the preparation of malt liquors. This million and fifty thousand acres of land, if employed in the cultivation of nutritious grain, would go far to relieve the present distress of the country, and to supply the poor man at least with cheap and unadulterated bread.

The Rev. John Wesley, in 1773, published a tract entitled "*Thoughts on the Present Scarcity of Provisions.*" He asks, "But why is food so dear?" "To come to particulars," he continues, "why does bread corn bear so high a price? To set aside partial cases (which, indeed, all put together, are little more than the fly upon the chariot wheel), the grand cause is, because such immense quantities of corn are continually consumed by distilling. [He might have added—and brewing.] Indeed, an eminent distiller near London, hearing this, warmly replied,—'Nay, my partner and I generally distil but a thousand quarters a week.' Probably so. And suppose five-and-twenty distillers in and near the town, consume each only the same quantity. Here are five-and-twenty thousand quarters a week, that is, about twelve hundred and fifty thousand quarters a year, consumed in and about London! Add the distillers throughout England, and have we not reason to believe, that (not a thirtieth or a twentieth part only, but, (little less than half the wheat produced in the kingdom is every year consumed, not by so harmless a way as throwing it into the sea, but by converting it into deadly poison; poison that naturally destroys not only the strength of life, but also the morals of our countrymen.'" Mr. Wesley then enters into statements to prove his estimate, and to show that our calculations in this respect must not be guided by the corn for which duty is paid, inasmuch as for every gallon distilled which pays duty, many gallons are distilled which pay none. He then concludes with this striking exclamation: "O tell it not in Constantinople, that the English raise the royal revenue by selling the flesh and blood of their countrymen."*

Let us take as an additional example the case of America. In 1818, according to a distillery register, there were manufactured from grain from which bread, the staff of life is made, eight millions of gallons of spirits. Taking as an average that one bushel of grain would make little more than two gallons of spirit, the result would be the destruction during the year 1818, of nine millions of bushels of grain. Accord-

* Enquiry into the use of spirituous liquors, p. 83.

† Wallace, on the Manufactures of Ireland, p. 278.

‡ Paley's Moral Philosophy, book ii. chap. 11.

* Wesley's works, vol. vi., p. 51.

ing to calculations made by competent persons, the quantity of grain manufactured into liquors of an inebriating description would be three times that used for the same purpose in 1818. Hence we have on this supposition the enormous quantity of fifty-four millions of gallons of strong drink, for the manufacture of which poison, has been wickedly *destroyed, twenty-seven millions of bushels of nutritious grain*. The quantity of grain thus destroyed would supply the inhabitants of the United States (twenty millions), with half their food for the space of four months. This calculation is made on the supposition that half the food of man consists of grain, that is about half a peck per week, or six and a half bushels per annum. This grain is calculated to supply the whole of the inhabitants of the state of Maine (four hundred thousand) with bread for ten years.*

In 1835, in the State of New York, according to estimates in William's Register, three millions of bushels of rye and corn, one million two hundred thousand of bushels of barley, making in all a total of four millions, two hundred thousand bushels of grain, were destroyed by distillation. The cost of this would be about 5,000,000 dollars. Making some deductions for the employment of a portion of this in food, for reasons not necessary in the present place to state, the total loss to the state in 1837, by the manufacture of strong drink, would be not less than five million dollars, and this too, as the source from whence these calculations are made states, for articles which neither procure food nor raiment, build houses nor clear nor improve farms, and might, as far as any pecuniary advantage to the country is concerned, be sunk into the ocean.

4. *Loss of property by land and sea.*—*Security of property*, in a national as well as individual point of view, is too important to be overlooked. The safety of property, as well as human life on sea and on land, is peculiarly endangered by the use of strong drink. The recent parliamentary investigation, on the causes of shipwreck, shows that a very great proportion of the accidents which occur at sea, arise from the presence of *intoxicating liquors on board the vessels*. The actual annual average loss by means of shipwrecks, was shown to amount to no less than £2,836,666; an amount which certainly falls short of the reality. At least *two-thirds* of this loss may be directly or indirectly attributed to intemperance. Some of these instances are too recent and too awful in their consequences to be forgotten. The narratives of them contain most heart-rending descriptions of loss of life and property, which would not have occurred, had it not been for the presence of the accursed thing on board the vessels.

Captain E. P. Brenton, R. N., who states

that the prevailing habit of intemperance among seamen had constantly engaged his attention for forty-six years, relates some awful examples of the destruction of vessels from this prolific source of crime and disorder.

"During the late war," says this naval officer, "almost every accident that I ever witnessed on board ship was owing to drunkenness. I should prefer five hundred men in a line of battle ship without spirituous liquors, to six hundred men with spirituous liquors."*

Instances of ships being set on fire by drawing off spirits for the supply of the men are very common. The *St. George*, of ninety-eight guns, about the year 1759, was burnt at sea, and five hundred-and-fifty of her men, or thereabout, lost. The cause of the fire was drunkenness; the boatswain's yeoman, with some other men, had got drunk in the boatswain's store-room, and set fire to the ship.†

Admiral Lord Rodney, 1782, relates the following horrible example. "The fate of the *Cæsar* has been truly pitiable. The night of the action, soon after dark, she took fire, by an English marine carrying a candle below in search of liquor, and a cask of spirits catching fire, the flames spread so fast that they could not be extinguished. After burning for some time, till the fire reached the powder magazine, the ship blew up (the second horrid spectacle of this kind to which I have been witness.) The French captain, who had been severely wounded, and the greater part of the men on board, both English and French, perished. Some saved themselves before the explosion; others who survived it, and clung to parts of the wreck, were most of them overwhelmed in the waves, or miserably scorched with the flames; and those who attempted to save themselves, relate that they saw a spectacle too horrible to describe—the men who clung to the wreck were torn off by the voracious sharks, which always swarm in these seas, after an engagement, and were not yet glutted with the carnage of the preceding day."

The burning of the *Kent* East Indiaman, in the Bay of Biscay, was occasioned by the holding a candle over the bung-hole of a cask of spirits. The snuff fell into the cask, and set it on fire. The *Edgar*, of seventy guns, was burnt at Spithead owing to the presence of spirituous liquors on board. The *Ajax*, of seventy-four guns, commanded by Sir Henry Blackwood, was burnt at the mouth of the Dardanelles in 1806, by the drunkenness of the purser's steward. The *Halswell*, East Indiaman, was lost in 1786, off St. Alban's Head, west of the Needles, through drunkenness.

Captain Brenton tells us that he holds spirituous liquors to be more dangerous on board vessels than gunpowder. The one, he

* Journal of the American Temperance Union, 1837, p. 56.

* Parliamentary Evidence, p. 328.

† Ibid.

remarks, is an essential element of power on board a man of war, and the other is wholly unnecessary, either for strength or for courage. He has known the gunner and his crew go drunk into the magazine. When on the coast of America, at the latter end of the last war, the Admiral told Captain Brenton that he had a lieutenant commanding a schooner on the station who was a drunkard. "What shall I do with him?" he said. He replied, "sir, send him home; make him invalid, and go home." "Then he will lose his bread," was the answer. Captain Brenton said "sir, he had better lose his bread than lose his ship, and the lives of all his people." The Admiral remarked, "you are rather severe, I think." "No, I am not, sir, but I wish you would send him home." He did not. The lieutenant in question sailed from Halifax harbour, with forty seamen on board; it was known that himself and his crew were drunk when they sailed. They ran on shore upon the Sister Rocks, and every soul perished.*

The fate of the *Rothsay Castle* must be within the recollection of all. The loss of that vessel, with one hundred persons, was mainly attributed to the intemperate habits of the captain. Several similar awful examples of loss of lives and vessels through drunkenness, not long ago, took place in the United States.

Mr. C. Purnell, of Liverpool, when asked what he supposed to be the chief causes in operation which lead to the frequent shipwrecks, replied, "I should confine myself principally, to one great cause, which I think consists in the ignorance and *drunkenness* of the masters and crews of merchant ships."†

The "Report of the Select Committee of the House of Commons on Shipwrecks," 1836, contains some interesting and valuable evidence on the subject. The total number of ships or vessels wrecked and missed in 1816-17 and 1818 was 1,203. In the year 1833-34 and 1835 the number was 1,702, making a grand total, in the six years, of nearly three thousand vessels. Taking the number of vessels wrecked and lost in this period at the assumed value of £5,000 for each ship and cargo, on the average of the whole, the loss of property occasioned by these wrecks would amount in the first three years to £6,015,000, being an average of £2,005,000 per annum; and in the last three years to £8,510,000, being an average of £2,836,666 per annum.

More than three hundred vessels, and one thousand lives, chiefly belonging to the United States, were totally lost in the year 1836 at sea, through the use of intoxicating liquors.‡

The citizens of St. Louis, in a circular addressed to the influential citizens of all the

cities and towns upon the western waters, requesting them to unite their influence and exertions in endeavouring to suppress the sale and use of spirituous liquors, state, "the terrible, reckless waste of human life, to say nothing of the immense loss of property, and the frequent occurrence of these accidents, shock all the feelings of humanity, and call '*trumpet-tongued*,' for relief. And when it is understood, that a large portion of these disasters owe their origin to an intemperate use of ardent spirits on board, the contemplation becomes too revolting for human kindness to palliate, or human patience to endure."*

The Committee state the following among the principal causes of shipwreck. "Drunkenness, either in the masters, officers, or men, is a frequent cause of ships being wrecked, leading often to improper and contradictory orders and directions on the part of the officers; sleeping on the look-out or at the helm among the men; occasioning ships to run foul of each other at night, and one or both foundering; to vessels being taken aback, or overpowered by sudden squalls, and sinking, upsetting, or getting dismasted, for want of timely vigilance in preparing for the danger; and to the steering wrong courses so as to run upon dangers which might have otherwise been avoided." And, again, "The practice of taking large quantities of ardent spirits, as part of the stores of ships, whether in the navy or in the merchant service, and the habitual use of such spirits, even when diluted with water, and in, what is ordinarily considered, the moderate quantity served to each man at sea, is itself a very frequent cause of the loss of ships and crews; ships frequently taking fire from the drawing off of spirits, which are always kept under hold; crews frequently getting access to the spirit-casks and becoming intoxicated."

The Report of the American Temperance Union, for 1838, says, that "more especially on the western waters are presented results, in the intemperance of crews and travellers, in explosions, conflagrations, and wrecks, which make the ear of every one that heareth to tingle. It would seem to be the highest triumph of the spirit of evil to have three hundred innocent passengers committed to the captain of a steamer, kindled up to madness by the fires of alcohol." And again, "Casualties, shipwrecks, steam-boat explosions, of the most appalling character, through intemperance, are continually bursting upon the ear, and agonizing the hearts of the community."†

The steamer, *Ben Sherrod*, on the 9th of May, 1837, was destroyed at midnight, by fire, on the river Mississippi, and one hundred and fifty lives lost. A Committee of Examination, on careful enquiry, said, "that,

* Parliamentary Evidence, p. 329.

* Ibid. p. 366.

‡ Journal of the American Temp. Union, 1837. p. 107.

* Report of Amer. Temp. Union for 1838. p. 53.

† Ibid. pp. 53—62.

at the time the Sherrod took fire, the hands on duty were in a state of intoxication, having at all times access to a barrel of whiskey, placed forward of the boiler deck for their use; and that the engineer then on duty was equally culpable, having furnished the fireman with large quantities of brandy, or other spirits, as an inducement to keep up excessive fires, with a view of overtaking the Prairie, then ahead."

In November, the steam packet Home, was wrecked on the coast of North Carolina, and ninety-five individuals, chiefly persons of rank in society, were suddenly engulfed in eternity. The captain, according to the evidence of ten of the passengers, was incompetent to the command from intoxication. The same Report of the American Temperance Society informs us that more than one thousand lives have been sacrificed in a short period by the burning or explosion of boats and ships, navigated by steam, the principal cause of which disaster is the intemperance of the seamen.*

The loss of property *on land* from the same cause is too extensive to be accurately estimated. Not a day passes but instances are recorded of accidents to property, originating in the vice of intemperance. Its safety is rendered at all times uncertain by the great number of evil and wicked persons who infest the land. Riots of the most fearful character arising from the same prolific source, are not uncommon in this country, whereby a large amount of property has been irrecoverably destroyed.

Mr. Poynder, in his Evidence before the Select Committee on the State of the Police of the metropolis, 1817, informs us of some examples in point. Cashman, the rioter, then lately executed in London, assured him before his death that he had been drinking spirits repeatedly before he joined the mob. This was the case with others of the rioters, and spirits were given gratuitously to the mob. The same gentleman states that the frame breakers in Nottinghamshire and Leicestershire are found to have almost invariably drunk spirits before the different attacks. Those who attacked Mr. Cartwright's mill, were all under the influence of liquor, and were even supplied with it during the progress of the attack by their comrades.

An immense amount of property was destroyed during the disastrous Bristol riots, 1830. The men who committed this wanton and diabolical deed were instigated and spurred on by the demoniacal aid of strong drink. The magistrates immediately after these riots ordered the public houses to be closed, for a limited period, at nine in the evening. During that time a state of order, and regularity, and quietness, and freedom from assault and crimes, produced by drunkenness, which previously prevailed, reigned

universally. The city was particularly tranquil.*

Three men, not many years ago, were executed at Fisherton, Wilts, for setting fire to premises. G. Watts, aged seventeen, one of the culprits, made a full confession of his guilt; acknowledged the justice of his sentence and attributed his disgraceful end to *drunkenness* and sabbath-breaking; crimes usually found in close association. This man was so conversant with scripture as to be able to refer to almost any passage in the bible. The above case is only an illustration of numerous others, in which property has been destroyed under the excitement of liquor.

Innumerable accidents annually occur in various ways, by which property of all kinds is injured or destroyed to a vast amount by the same prolific cause. Destruction of conveyances, both of persons and property, through the carelessness of intemperate drivers, numerous fires and consequent loss of houses and other property, occasions an annual loss which, if it were possible to calculate, would excite no less amazement than alarm.

5. *Loss to trade and manufactures.*—From what has been stated, it will appear, that commercial activity and success are materially obstructed by the use of strong drink. In the eighteenth century, investigation was directed to this subject, the result of which was the establishment of the fact, that industry and commerce were seriously injured by the intemperate habits of the people. A parliamentary petition, from Bristol, in the year 1750, states "that the bad effects of spirituous liquors had become apparent in the destruction of the moral and social habits of the people:" corrupting their morals, and rendering them indolent and incapable of laborious and manly employments," &c. The merchants of Bristol add, that even "commerce was injured" by them, and strongly call for legislative interference. Other petitions at the same period assert, that the consequences of the general use of spirituous liquors were "idleness and aversion to industry," "enervating the powers of body and mind amongst the labouring classes, and rendering them unfit alike for the service of God, or their fellow-creatures."†

Similar effects were observed in a still greater degree in Ireland. That unfortunate country, indeed, was in danger of utter degradation and ruin, as a commercial and industrious nation. The Parliamentary petitions at this period express great dread at the alarming consumption of intoxicating liquors. These direful effects were experienced in all conditions of life, both among the agricultural population, and those engaged in commercial pursuits. In 1761, a petition

* Report of Amer. Temp. Union for 1838. Appendix, p. 93.

* Parl. Evid., 1831. p. 153.

† English Commons' Journal. Vol. 26, p. 24

was presented from the Corporation of Sheermen and Dyers, complaining of the decay of silken and woollen manufactures, and attributing it to the enlarged facilities afforded for intemperance, by the daily increasing number of places for the sale of intoxicating liquors, in that part of the city where those manufactures were carried on, "whereby a ready opportunity was offered to the journeymen and servants concerned therein, to make too free a use of spirits, by which they were frequently rendered incapable, for a great part of their time, from following their occupations, to the manifest injury, not only of themselves and their families, but of the public:" and expressing their apprehension, "that if a speedy stop was not put to this *growing evil*, several very valuable manufactures would be lost, and the greatest poverty and distress, with many other evils, introduced among those who ought to be their riches and defence."* The woollen, linen, and silken manufacturers stated the same practice to be "a great cause of *the decay of trade*, as the working people became idle and dissolute; and, as they did not work above half their time, and were under the necessity of entering into unlawful combinations to enhance the price of labour, which prevented the petitioners from bringing their manufactures to market on proper terms." The weavers of Dublin were alarmed at the same evils, for, in a petition which they forwarded to the Irish Parliament, they set forth the decay of trade, and attributed it to the increase of spirit-shops in those parts of the city where the manufacturers resided, whereby the *temptation was always before them*, to free indulgence in the use of spirits. *In consequence of this they seldom worked on Monday*, but entered into combinations to make good their sloth and extravagance. "That the spirit of industry, decency in dwelling and apparel, which formerly obtained amongst them, was almost eradicated, and in place thereof, idleness, filth, and nastiness, in every *circumstance of life*, with an unbounded licentiousness of manners, which had produced the most dangerous riots and disorders, and it was feared would produce disorders more fatal to the peace and good order of the metropolis.†

The Parliamentary investigation which followed, fully substantiated the truth of these petitions, and alleged that the "decay of manufactures was principally to be attributed to the use of spirituous liquors."

A writer of experience, whose attention was particularly directed to this subject, remarks on the distillation of spirits as follows:—"Of manufactures it has been the bane. It has disinclined and disabled the workman to perform his work with either accuracy or dispatch; it has made him combine against his employer, to extort the means of dissipation, and it has made him more idle to

spend them. In a word, it has filled our streets with beggary, riot, and vice—has raised the prices, and spoiled the quality of our goods, and has made the fertility of our island, instead of a blessing, a curse."*

Dr. Crumpe, of Dublin, speaks of intemperance as a vice "from which the most serious obstructions arise to their industry and employment."†

These illustrations might be greatly multiplied, but they are amply sufficient to exhibit the pernicious influence of intemperance in obstructing commercial activity and enterprise. The injuries inflicted by intemperance on the industry and wealth of nations, will, however be more distinctly seen, when contrasted with the results of national sobriety, of which some pleasing instances are now adduced.

Mr. Colquhoun relates, as an interesting and important fact, that during the period when the distilleries were stopped in 1796 and 1797, although bread and every necessary of life was considerably higher than during the preceding year, the poor in that quarter of the town, where the chief part resided, were apparently more comfortable, paid their rents more regularly, and were better fed, than at any period for some years before, even although they had not the benefit of the extensive charities which were distributed in 1795. "This," he remarks, "can only be accounted for by their being denied the indulgence of gin; which had become, in a great measure, inaccessible from its very high price. It may fairly be concluded, that the money formerly spent in this imprudent manner, had been applied in the purchase of provisions, and other necessities, to the amount of some hundred thousand pounds."‡ In addition to this change of circumstances it was observed that quarrels and assaults were less frequent, and they resorted less often to the pawnbroker's shop.

Contrast this pleasing statement with the condition of the people in 1732, and which may, in some degree, illustrate their circumstances, at a period, when indulgence in strong drink was so general. "Throughout the Bills of Mortality, the poor housekeepers have not one quarter of the household goods they used to have; and small farmers, in the neighbourhood of London, can scarce show a clean suit of clothes to go to church."||

In Ireland, a temporary prohibition of distillation, occasioned by a scarcity of corn, and consequent diminished consumption of spirituous liquors was attended with similar beneficial results. Although the price of provisions was high, and consequently a certain amount of distress more or less prevailing in such years, "*the population of*

* An Essay on the Manufactures of Ireland, &c., &c., by Thomas Wallace, M.R.J.A. 1798. p. 106.

† Essay on the best means of providing Employment for the People, by Samuel Crumpe, M.D., M.R.I.A., 1793, p. 186.

‡ Colquhoun on the Police of the Metropolis. 1800.
|| Gentleman's Magazine, vol. ii. p. 603.

* Irish Commons' Journal, vol. vii. p. 307.

† Ibid. p. 303

Ireland was enabled to consume a greater quantity of articles of luxury and comfort than in years of absolute plenty."*

Dr. Henry, in allusion to the stoppage of distillation in 1758-9, remarks, "the salutary effects of which were seen, restoring new vigor to our languishing manufactures, and a visible reformation in the morals of the people."†

Changes in the ownership of property continually occur through intemperance, by which a large amount of evil influence is entailed on our commercial and agricultural interests.. This subject, perhaps, will be best illustrated by the following facts.

A farmer, in Connecticut, who, for thirty years had occupied the same farm on lease, complained that he had not been able to store up any thing as the result of his exertions during that period. A neighbouring store-keeper, who heard him make this statement, was candid enough to explain to him the reason. He accordingly informed him, that during the thirty years he had been on the farm he had expended in his store on ardent spirits, a sum which, added to its interest, would have made the farmer owner of the farm which he was then obliged to hire. On examination of the books of the store-keeper his assertion was found to be correct. The farm was worth five thousand dollars.‡

The following statements, relative to the number of estates which in different towns passed from the hands of their owners in consequence of intemperance, were collected by the corresponding secretary of the Massachusetts Temperance Society. Ardent spirits, we must premise, are almost exclusively the intoxicating liquors used in America by the mass of the people.

"In a town in the interior, containing, at the last census, less than twelve hundred inhabitants, twenty farms have been lost to the owners, since the year 1800, through intemperance; and the owners of twenty more have been reduced, from the same cause, sold their farms, moved out of town, and come to poverty. This town is now remarkable for temperance. An elderly inhabitant remarked that, twenty years ago, three families in five were becoming poorer; but now, said he, the town is highly prosperous, and if any family among us is becoming poorer, it is because there is a drunkard in it.

"A correspondent from another town, of about thirteen hundred inhabitants, says 'I have submitted your inquiries to two gentlemen, who have been conversant with the affairs of this town for forty or fifty years, and they have informed me that twenty-two farms have passed from the hands of the owners in consequence of the use of ardent spirit, within the last twenty years.'

"Another correspondent, from a town of about the same number of inhabitants, says, 'I have consulted with some other individuals, and we find the subject rather difficult; but have counted thirty-seven cases in which farms have changed owners, in consequence of spirit drinking, since 1800.'

"From an aged and respectable inhabitant of another town, the following has been received:—'As I promised, I have cast my eye over the parish to which I belong, containing a population of about thirteen hundred, and I find that, within thirty-five years past, at least thirty-five farms and tenements have gone out of the owners' hands, in consequence of the use of ardent spirits; and in a short time, five more may be safely added.'

"In another town, containing less than nine hundred inhabitants, and about one hundred farms, and at present greatly distinguished for temperance and prosperity, it has been found that thirty farms, within the same period, have been lost in the same way; and, in some instances, the same farm has been twice lost.'

"A correspondent from a town in the county of Berkshire, says, 'I cannot state the number of farms that have passed from their owners within the time you name. There have been several persons within my recollection, who have lost their estates wholly, or become so embarrassed as to be obliged to sell, principally from the too free use of spirits. Indeed, I think the embarrassment, and consequent loss of property, of which three-fifths of our farmers and mechanics complain in this county, can fairly be traced to this source.'

"A highly respectable merchant in Vermont, stated that, after dealing in ardent spirit fourteen years, and examining his accounts, and the effect of this traffic on his customers, he found that out of six hundred and forty-three customers, two hundred and four had become drunkards and tipplers; a number had died suddenly; one perished on his way home, on a cold winter's evening; twenty farms and mechanics' establishments (*viz.*, manufactories) had been sold, mortgaged, and deeded to sons; and the merchant's own loss in bad debts, on the account of intemperance, was about nine hundred and sixty dollars. Convinced that he was one among the number engaged in making drunkards, he had abandoned the traffic, and, for one year, had kept wine and brandy to sell as medicine only, but found he could do this no longer, as the drunkard would send a boy to say, *I want it for medicine*, and then get tipsy.'

"During the last fifty years, there have been eighty estates squandered by intemperate owners, in the town of Northampton, Massachusetts; and one hundred and forty deaths resulting from drunkenness alone."*

* Inquiry into the Influence of Ardent Spirits in Ireland, 1830. p. 102.

† Earnest Address to the People of Ireland, &c., by W. Henry, D.D., F.R.S., 1761. p. 1.

‡ New York Farmer, 1830.

* Twenty-third Report of the Massachusetts Temperance Society.

Innumerable similar examples might be adduced as having occurred in this country. They are indeed so frequent in occurrence as to render further detail quite unnecessary.

These facts cannot fail to excite deep attention on the part of those who feel interested in our national prosperity. Industry, commerce, and consequently, wealth, have been seen to be, in a great measure, influenced by the consumption of intoxicating liquors. The removal, therefore, of this fearful obstacle to national improvement, becomes a matter of the highest importance, and would secure to our country an amount of benefit which it has seldom or never before experienced. Among other probable benefits which would be derived from a measure of this kind, would be a state of commercial prosperity sufficient to find work for every unemployed man in the kingdom. The destitute poor would acquire a taste for the conveniences of life, together with the means of procuring them. The immense sums now annually worse than wasted in the consumption of intoxicating liquors, would, in all probability, be expended in the purchase of useful articles, and thus a mighty impulse imparted to trade. That the observations now advanced are not visionary in their character, may be seen from the data which have already been given, and from numerous instances of benefit which have attended recent reformatory on a less enlarged scale. An eminent political economist has stated that it is to the desire to rise in the world, to improve our condition, and to obtain a constantly increasing command over the conveniences and luxuries of life, that society has been indebted for improvement.* The temperance reformation has the strongest tendency to promote this object, and to ameliorate in other respects, the social and moral condition of the world.

6. *Loss in other various ways, with calculations of the total national loss.*—Wise and reflecting individuals have long doubted the wisdom of government, in a pecuniary point of view, in extending its patronage to the manufacture of intoxicating liquors. Within the last few years this subject has received more peculiar consideration, the results of which will now be laid before the reader in as brief a manner as possible.

Mr. Mark Moore, in his examination before the Select Committee of the House of Commons, in reference to what he terms the "great delusion" of the Chancellors of the Exchequer, which he supposes to arise from the revenue of £8,000,000 per annum, derived from the tax on ardent spirits, remarks, "There are two sides to this account; and I am satisfied from the partial investigation I have been able to make, if the necessary Parliamentary returns were made out, it would be found that the frightful expenses to which the nation is put on

account of crime originating in intemperance in connexion with the licensing system, would very far exceed and outbalance the Chancellor's large receipts."*

The Rev. Dr. Scoresby, vicar of Bradford, remarks, that "there would be such a gain of national wealth, by the disuse of spirits, as to enable the country to afford many times the amount of the present duties in another form. An apparent loss to the revenue, would eventually be an immense real gain." And again, "If we suppose the present revenue from ardent spirits, derived from the consumption of the labouring classes, to be five millions sterling, then, I conceive, that for this portion of gain to the treasury, other classes of the people are in reality taxed to the extent of fifteen or twenty millions."†

J. Poynder, Esq., late under-sheriff of Middlesex and London, remarks, "If any considerable change could be induced in the national habits in respect to drinking, a very large saving would accrue in this department of the state, (*the heavy expenses of the criminal judicature of the country*), and probably such a saving as would be found even more than adequate to the revenue derived from distillation. It seems well worthy of consideration whether the peculiar facilities for drinking which are provided throughout the country, do not, by furnishing to the poor and uninstructed temptations to crime which are too strong to resist, occasion, at the same time, a charge to the country, in repressing and punishing that crime, which is more than equal, even in a pecuniary point of view, to any advantage which can ever be derived from such a polluted source."‡

Dr. Grey, in his "Essential Principles of the Wealth of Nations Illustrated," remarks, "fields of industry are better than houses of industry. What avail houses of industry, and orphan houses, and parish schools, to mend the morals of the people of Dublin, when in one street alone there are fifty-two houses licensed to sell spirits? That a revenue derived from such a source should be an object worthy of encouragement, it is impossible to believe."

Mr. Carr, in his "Stranger in Ireland," observes, "a government might as well impose a tax on coffins, and then inoculate all its subjects with the plague, to increase the revenue."

The various losses, in a monetary point of view, which result from the manufacture and use of intoxicating liquors, may be arranged under the following heads:—

1. The whole sum expended by consumers in the purchase of intoxicating liquors.
2. The loss of time which the use of strong drink occasions in various ways.
3. The diminished productiveness of land, labour, and capital.

* Parl. Evid. p. 345.

† Ibid. pp. 382—3.

‡ Parl. Evid. on the Police of the Metropolis. 1817

† McCulloch's Political Economy.

4. The property lost in consequence of drunkenness by casualties, both on land and on sea.
5. The cost of pauperism, and the criminal judicature of the land, from the same cause.
6. The loss of health and of intellect, and the consequent necessary expenditure.
7. The abbreviation of human life, and the loss of human labour which results therefrom.

Examples of the immense sums expended in the purchase of intoxicating liquors are abundant and instructive. A few only are now adduced by way of illustration.

Some of the items of the expenditure of the Lord Steward of the Royal Household, for 1840, are as follows:—Bread, £2,350; butter, bacon, cheese, and eggs, £5,153; milk and cream, £1,500; butchers' meat, £10,000; grocery, £5,000, &c., &c., &c., wine, £5,250; liquors, &c., £2,000; ale and beer, £3,000. Total annual expenditure, £69,765. Thus it will be seen that there is expended in intoxicating liquors £10,250, or one-seventh of the whole expenditure of the Royal Household.

It is calculated that £20,000 are spent every sabbath day at the various public-houses in and near the Metropolis, principally by the working classes.

In Bradford, Yorkshire, there are one hundred and fifty gin shops and public houses, about one hundred and seventy beer shops, and four breweries. It is calculated that there are £2,030 spent every week at these places. To this sum add, for *loss of time*, £487 10s., and for various losses consequent upon drinking, £250, and the total will be £2,767 10s. Deduct for the necessary expenses of travellers, tradesmen, &c., and it will leave a net *weekly loss* to the town of Bradford of £2,267 10s.; or £323 18s. 6d. per day; yearly £117,910; and in eight years and a half, *upwards of one million pounds sterling*.

In Leeds, during the year 1835, there were two hundred and ninety-seven inns, hotels, and taverns, in addition to two hundred and eighty-nine beer shops within the borough, making a total of five hundred and eighty-six houses licensed for the sale of intoxicating liquors. A calculation was made that the former averaged in their receipts at least £17 per week, and the latter £3, during the same period. This expenditure amounts to £307,632 per annum. A similar calculation makes the same annual expenditure in Stockport £126,000.

A recent Report of the Bristol Temperance Society states that in that city and its immediate neighbourhood a sum exceeding £150,000 is annually spent in strong drink, by the labouring classes and those ranking immediately above them.

In Glasgow, accurate calculations make the total annual expenditure in spirits no less than £450,000.

The sum annually expended in Edinburgh, on the same destructive poisons, is said to be nearly £400,000; being nearly equal to the whole amount raised by all the Bible and Missionary Societies in Great Britain.

The Rev. James Edwards, of Brighton, recently made the following calculation in reference to the drinking system in that place, upon what he terms a moderate scale:—

110 public houses, including sixteen hotels.

	£	s.	d.
Average rent of each, £150..	16,500	0	0
Average amount of taxes,			
£30 each	3,300	0	0
Servants' board and wages,			
four each, at £30	13,200	0	0
For the support of 110 fami-			
lies, £4 per week each	22,880	0	0
Losses and sundry expenses,			
average £80 a year	8,800	0	0
	64,680	0	0
Goods for sale....	£194,040		4
Profits on sale, $\frac{1}{4}$	64,680		
	258,720	0	0
Deduct $\frac{1}{3}$ for eating .	86,240		

172,480

170 beer shops.

Average rent £20 per year .	3400	0	0
Average taxes per year, £4			
each	680	0	0
170 families, 15s. per week			
support	6630	0	0
Losses and sundry expenses,			
£10 each.....	1700	0	0
	12,410	0	0

Goods for sale.... £37,230

Profit $\frac{1}{4}$

49,640

172,480

£222,120 equal to £4271
10s. per week.

Persons engaged in the sale, 2086.

The local taxes are £35,480 per annum, being less than one-sixth of the sum annually expended in liquor.

The visitors, who frequent the town, of course add to the consumption. Yet, says Mr. Edwards, with all this multitude of licensed houses and beer shops at present existing, the magistrates are pestered to grant more licenses, and every sort of means is resorted to to obtain them. The high constable indeed had been obliged to furnish a plan of the town, showing, in every street, the situation of the existing establishments, which were thickly studded in all directions.

The influence of intemperance, in the production of crime, will be shown in a succeeding portion of this section. It will be sufficient, in this place, to remark that the cost of three-fourths of crime is directly chargeable to intemperance.

Mr. S. Redgrave, in an article entitled "Some data on the present state of Crime in England and Wales," gives the following calculations in reference to the cost of crime. The county-rate commissioners, in their preliminary report state, that the average expense of a prosecution at the assizes is about £19; at the quarter sessions £7 10s.; and at the municipal courts £5 8s. 6d.

At these rates the expenses of prosecutions would be..... £186,915

In the Lords' Report on County Rates the expenses of prisons, for one year, are stated to amount to..... 177,245

And the maintenance of prisoners 127,297

To these sums must be added the annual charge for maintaining transports, at home and in Bermuda, about 75,000

In New South Wales and Van Dieman's Land..... 130,000

And in the Penitentiary 20,000

Total per annum £716,457

If to these sums, which are all taken from Parliamentary Papers, could be ascertained and added, the expenses of the judges, clerks of assize, and many other attendant charges, the amount would be considerably increased; but if the costs incurred in the *prevention* of crime were included in the calculation, the amount would be almost doubled. Some idea may be formed on this point from the expense of the police establishments of the Metropolis alone, which are not less than £300,000 per annum. Mr. Redgrave suggests that, supposing the total annual cost to the country for the prevention, prosecution, and punishment of crime, to be one million and a half, and the number of persons living by the violation of the laws to be fifty thousand, the good behaviour of every criminal might be purchased by a gratuity of £30 per annum, and the public be gainers by the arrangement, of the whole amount of property of which they are annually plundered, and of a feeling of security above all price.*

The following table, though imperfect, has been carefully prepared from the official returns for 1836, as published in the Companion to the Almanack.

32,823,024 bushels of malt brewed by public brewers and licensed victuallers, taken at 12 gallons to the bushel, and at 2s. per gallon £39,387,628

Deduct for malt liquorexported 225,641

39,161,987

6,223,592 bushels brewed by private families, cost of malt at 7s. 6d. 2,333,847

* Proceedings of the Statistical Society of London. Vol. 1. p. 180.

Hops, 1 lb. per bushel, at 1s. per lb. 311,179

Interest upon capital, and wear and tear of private brewing utensils 1,050,230

TOTAL ANNUAL cost of malt liquor 42,857,243

6,420,342 imperial gallons of wine, at 22s. 6d. per gallon 6,750,000

This is supposing 6 bottles to the gallon, half used at private tables, 2s. 6d. per bottle; the other half at public tables, at 5s. per bottle 1,500,000

Cyder, perry, home-madewines no data 20,528,889 imperial gallons of

spirit, averaged to cost consumer 17,250,000

Police, jails, prosecutions, &c., 2,000,000

The cost of pauperism, say at a very low estimate 5,000,000

Loss of labor, taken by Mr. Buckingham, at 50 millions, say 30,000,000

105,357,243

For medicinal purposes, &c... 5,357,243

Showing an annual sacrifice of 100,000,000

To these items we might add numerous others, such as a large proportion of the expenses incurred by lunatic asylums, infirmaries, and other hospitals for the sick, and the maim. By far the most important loss, however, will arise from so vast an amount of money not being devoted to useful purposes, or employed in the purchase of useful articles.

It will be seen from the above table that the sum of £51,107,243 is annually expended on *fermented drinks*, £17,250,000 only being paid for *ardent spirits*. The amount of alcohol in fermented liquors exceeds very much that in distilled spirits, as the following calculation will show.

Fermented liquor will be equal, in intoxicating power, to Gals. of spirits. 63,780,095

Total of distilled spirits.... 29,528,889

Excess of intoxicating power in fermented liquors above distilled 34,251,206

Malt liquor is taken, at eight gallons as being equal in alcohol, or intoxicating quality, to one gallon of spirits; and two gallons of wine as equal to one of distilled spirit, of ordinary strength, as sold to the consumer.

The use of inebriating drinks in Great Britain has occasioned a greater expenditure

of money and life, than war with all its attendant slaughter and expense. The following tables will place this subject in a clear light.

WARS.	Cost to Great Britain.	Total Loss of Life.
War of the British Revolution	£ 31,000,000	230,000
War of the Spanish Revolution	44,000,000	230,000
Spanish War and Austrian Succession	47,000,000	240,000
Nova Scotia, Seven Years' War	107,000,000	650,000
American War	151,000,000	340,000
War of the French Revolution	472,000,000	700,000
War against Buonaparte	586,000,000	1,400,000
	£1,437,000,000	3,100,000
Present National Debt, £761,347,690.		

In the next table, the above time, commencing with the revolution in 1688, is divided into three periods of fifty years each. The estimates given in the two first periods, are prepared from probable calculations certainly within the mark; that in the latter period is formed from data, supplied by recent accurate investigation.

From the Year	Cost of Intoxication		Deaths of drunkards	
	in each year	in 50 years	each year	50 years
1688 to 1740	£10,000,000	£ 500,000,000	15,000	750,000
1740 to 1790	20,000,000	1,000,000,000	30,000	1,500,000
1790 to 1840	50,000,000	2,000,000,000	60,000	3,000,000
Total Money £3,600,000,000 | Total Lives 5,250,000				

These moderate estimates show that the expenditure entailed on the nation by the use of strong drinks, amounts nearly to three times the sum expended in war. The destruction of human life, occasioned by the same direful cause, bears a yet greater disproportion. Alcohol destroys more lives, and hurries more souls into an unbidden eternity, than deadly steel or fiery powder. Unlike the latter instruments of destruction, it never ceases its fearful warfare, but with insatiable appetite ever, "like a roaring lion, walketh about, seeking whom it may devour."

The national profit, if we may use the phrase, to be placed against this amazing annual loss of one hundred millions of pounds sterling, will be seen from the following table, which exhibits the income which government derives from the use of inebriating liquors.

NET PRODUCE of the Custom and Exeise Duties, for the Year commeneing January 5, 1836.				
FERMENTED LIQUOR.	ENGLAND.	SCOTLAND.	IRELAND.	
Rum	£1,437,718	£ 47,197	£ 11,238	£
Brandy	1,353,762	39,535	20,287	
Geneva and other Spirits..	39,724	7,239	1,221	
British Spirits	2,390,888	1,594,554	1,518,038	
Spirit Licenees.	276,352	56,161	72,185	
	5,498,444	1,744,786	1,623,669	8,866,899
Malt	5,116,112	425,785	307,052	
Hops.	402,290			
Beer Licenees	305,075	21,688	27,977	
	5,823,477	447,473	335,029	6,605,979
Wines	1,484,894	116,090	190,049	1,791,033
				17,263,911

The gain to the revenue is thus seen to be £17,263,911, the loss to the country, and consequently loss in most respects to the revenue is not less than £100,000,000. Mr. Buckingham, however, who from his extensive investigation of this subject, must be considered as excellent authority, is of opinion, taking every thing into consideration, and calculating a gain of £50,000,000, in the increased amount of production which would follow universal temperance, that the "entire loss to the people of Great Britain, from the prevalence of intemperance and the use of intoxicating drinks, is at least two hundred millions of pounds sterling !"

Fifty millions is the largest amount of revenue ever realized in this country, even in times of commercial prosperity ; at a low

calculation, not more than half the sum lost by the use of intoxicating liquors, so that abstinence from these pernicious compounds would at once enable the people of Britain to pay the interest, or in other words, discharge the national debt. Nor does this calculation include the loss of souls, which is unknown and incalculable; the loss in regard to domestic happiness, morals and religion, and the national disgrace entailed by the vice and profligacy, and the thousand nameless ills which result from intemperance.

The following calculations, made on the above estimate, are contained in Mr. Hickson's Report on hand-loom weavers:—

ESTIMATED QUANTITY OF BEER AND SPIRITS consumed in the United Kingdom during the year 1836.				
Spirits (chiefly Gin) distilled in England for Home-consumption. £ s. d.				
Duty paid on	7,875,702 gals	Reduced for retailing 15 per cent	11,813,553 at 8s.	4,725,421 4 0
Spirits (chiefly Whiskey) distilled in Scotland for Home-consumption.				
Duty paid on	6,620,826	Reduced for retailing 15 per cent	7,613,950 14s.	5,329,765 0 0
Spirits (chiefly Whiskey) distilled in Ireland for Home-consumption.				
Duty paid on	12,248,772	Reduced for retailing 15 per cent	12,086,077 14s.	9,860,260 18 0
Rum, duty paid on	3,324,749	Reduced for retailing 15 per cent	3,823,461 14s.	2,676,422 14 0
Brandy, duty paid on	1,292,271	Reduced for retailing 15 per cent	1,486,111 30s.	2,229,166 10 0
Malt used by Brewers and Licensed Victuallers.				
4,279,468 Qrs. producing of Ale and Beer, at 108 gals. to the qr.	462,182,544 gals. at 1s 4d.			30,812,169 12 0
Total cost of Ale and Spirits drank in the year 1836.....				55,633,205 18 0
Average expenditure in Beer and Spirits, per family on 5,000,000 families £11 2 6 $\frac{1}{4}$				
Wine (not included)		6,809,212 gals. 20s.		6,809,212 0 0
Total.....				62,442,417 18 0

From this statement, it appears that the sum of £11 2s. 6 $\frac{1}{4}$ d., is annually expended by *each family* in Great Britain, in intoxicating liquors, exclusive of wine. According to the Australian almanack, the people of New South Wales, in 1829, paid for foreign spirits, hydrometer proof, £122,536; or about £3 10s. per head.

The following returns from the "finance accounts," exhibit the consumption of malt and British spirits, and of wine and foreign spirits, together with the gross revenue for the years 1838-9 and 1840.

		Principal consumption by the working classes.		Principal consumption by the opulent classes.	
	Year.	Malt Duty.	British Spirit Duty.	Customs Duty on Wine.	Customs Duty on Spirits.
		£	£	£	£
ENGLAND	{ 1838	4,307,851	2,520,050	1,560,764	2,684,653
	{ 1839	4,284,374	2,552,628	1,612,408	2,519,200
	{ 1840	4,464,575	2,628,286	1,580,594	2,352,945
SCOTLAND	{ 1838	583,335	1,437,428	121,004	81,713
	{ 1839	569,617	1,488,030	121,713	76,457
	{ 1840	584,182	1,541,358	130,126	66,173
IRELAND	{ 1838	289,869	1,510,092	192,618	29,479
	{ 1839	242,561	1,402,130	181,253	26,362
	{ 1840	200,108	1,032,582	162,088	22,268

This table not only exhibits the gross amount of revenue derived from this source, but the startling fact, that within the last three years, notwithstanding the efforts of Temperance Societies, a decidedly increased consumption of inebriating liquors has taken place, both in England and Scotland, among the operative classes of the community. With the exception of wine in Scotland, a decreased consumption has taken place in those drinks which are more particularly used by the opulent. The increase in British spirits between 1838 and 1840, has been more than four per cent. The increase in population among the operatives, by whom these liquors are chiefly used, cannot have been more than two per cent. This fact, remarks a recent writer, is more lamentable, when it is considered that the efforts of teetotalers have tended unquestionably to limit the total number of drinkers. The inference therefore is, that they who still drink, drink more than they did, or that a larger number

of persons have become spirit drinkers than teetotalers.*

The returns for Ireland, however, show no less a decrease in the revenue in two years, than £477,000, or a diminution of thirty-two per cent. off the Irish spirit duty alone. This amazing change is of course attributable to the operations of the Temperance Society.

To conclude this digression, it is now important yet further to exhibit the immense national loss which arises from the use of intoxicating liquors.

The same ruinous results attend the lamentable extension of the traffic in our colonies. The Australian newspaper informs us, that distillation, originally, was permitted (at Sydney) to encourage agriculture; but on the most favourable supposition, only one hundred and four thousand and forty-four gallons have been distilled from fifty-two

* Facts and Figures, No. 1. p. 16.

thousand and twenty-two bushels of grain, at 5s., equal to £13,005,10, an annual average in sixteen years of only £812 16s. 10d. to the benefit of agriculture. Altogether, states the same authority, the revenue has lost more than three times the amount which has gone into the pockets of the settlers. The local taxation, however, to which the settlers must be subject to repress crime, and to alleviate poverty, cannot fail to render this system one of considerable loss even to them.

In the city of Washington, the revenue from the sale of ardent spirits, was about 6000 dollars. The loss, as estimated by Judge Cranch, occasioned by the system, was probably not much less than 100,000 dollars.

In 1830 the support of pauperism in the county of Baltimore, Maryland, most of which was occasioned by the use of strong drink, cost more than 20,000 dollars. The revenue obtained did not exceed eight or nine thousand dollars.

The expenses of the city of New York in 1832, as stated in the Report of the comptroller, were 893,886,29 dollars, 685,385,74 of which were raised by a direct tax. The support of the criminal, pauper, and civil establishment, cost 315,782,98; and the cholera, in addition to all public and private charities and individual expenditures, cost 102,575,85 dollars; making a total of 418,358,83 dollars. By far the greatest proportion of this expense, independent of innumerable other evils, were the fruits of about three thousand spirit-venders, licensed to deal out poison to two hundred and ten thousand souls. 22,137 dollars form the amount of compensation for this patronage of so destructive a traffic. A committee of gentlemen who investigated this subject, states as follows:—"We, the people, pay about 400,000 dollars more than we should, if no drams were sold or drunk in the city. Suppose that only half of the expenses of cholera were occasioned by drinking, and five-sixths of the criminal, police, and pauper establishments, and one-half of the salaries of officers, it would amount to 302,099,15 dollars, which is now paid as a tax for licensed vices; over 10,000 dollars taken from the earnings of the people for every licensed grog-shop, which pays 10 dollars into the treasury."

In the year 1810 it was estimated that between five and six million bushels of grain were destroyed by distillation in the United States. On the supposition, that in twenty years this amount would be doubled, and that in 1830, twelve million bushels were subjected to distillation at that period, and that this to the growers was worth 50 cents a bushel, making a total of 6,000,000 dollars. The annual cost of crime and of pauperism produced by the use of spirituous liquors, was estimated at 7,050,000. Subtract from this the price of the grain, and from these

two items alone there will remain a loss of 1,500,000 dollars.*

The Committee of the legislature of Connecticut, to whom memorials on the subject of intemperance from that State were referred, in their Report, May, 1838; inform us, that from tables prepared with great care, and founded on authentic documents, the amount annually expended in that State for intoxicating drinks, was more than a million of dollars. Including the loss of time and labour, they further add, and the cost of pauperism and crime, the annual expense to the State, probably exceeds 2,000,000 of dollars. More than 1,000,000, however, is actually paid for the liquor annually consumed in the State.

Thus much as regards the revenue, derived from a system which spreads poverty, crime, and misery wherever it is in operation.

The Hon. William Cranch, chief judge of the district of Columbia, some of whose ingenious calculations we have already adduced, estimated the annual consumption of spirits, in America, prior to 1827, at seventy-two million gallons, which at 66 $\frac{2}{3}$ cents, makes *forty-eight millions of dollars*. This amount, he correctly observes, is annually lost to the country—as much lost as if as many dollars were actually cast into the sea; for the spirits are consumed without the least benefit in return.

The grain destroyed, he further observes, the labour of raising the grain, and converting it into spirits, the fuel consumed in the manufacture, are all lost to the country.

The farmer is paid for his grain, and the distiller for his liquor; but, remarks this writer, the poor man who buys it gets no return, but poverty, disease, and misery. To him, and to the country, it is worse than a total loss.

Judge Cranch, as we have before seen, estimates the loss of labour of three hundred and seventy-five thousand drunkards, at fifteen million dollars per annum, and the loss of ten years' labour of thirty-seven thousand five hundred men annually killed by spirituous liquors, at eighteen million seven hundred and fifty thousand dollars.

It is admitted, by all parties, that at least three-fourths of the whole cost of crime in the United States, is chargeable to the use of ardent spirits. Mr. Hopkins, of New York, who, remarks Judge Cranch, seems to have been very cautious in his estimates, gives as the result of his calculation, a total amount of *eight million five thousand dollars* as the cost of crime to the United States, three-fourths of which, chargeable to intemperance, is *six million five hundred and twenty-five thousand dollars*.

Three-fourths of the cost of pauperism in America is chargeable to the same cause. Mr. Hopkins estimates the whole annual cost of pauperism in the State of New York,

* Sixth Report of American Temp. Soc., 1833.

exclusive of the city, to be three million eight hundred thousand dollars; the whole of which, he thinks, might be fairly charged to intemperance. Three-fourths of this, however, is *two millions eight hundred and fifty thousand dollars*.

To these, says Judge Cranch, might be added the expense of those paupers who are supported wholly or partially by private and individual charity, orphan asylums, insane and other hospitals, and houses of refuge for juvenile offenders—and the loss of labour of prisoners confined for trial, or for punishment by simple imprisonment, or for debt—three-fourths of all which are properly chargeable to the use of ardent spirits. The amount of private charity is probably much greater than that of public.

The corporation of the city of Washington pays annually, for the support of the poor, about *three thousand five hundred dollars*. The population of the city was nineteen thousand, consisting of about three thousand five hundred families. The average amount of private charities must be more than one dollar a year for each family. Judge Cranch therefore adds another item of two million eight hundred and fifty thousand dollars, paid by the temperate for the intemperate.

The average number of prisoners in the gaol of the county of Washington, committed on criminal prosecutions, was about thirty. The population of the county was nearly thirty thousand. At that rate, the average number of criminal prisoners in the United States, was twelve thousand. The labour of each of these, if sober, would be worth upon an average, probably fifty dollars a year beyond the cost of his support, amounting to six hundred thousand dollars—three-fourths of which, chargeable to intemperance, is four hundred and fifty thousand dollars.

According to these calculations, the cost of the consumption of ardent spirits in the United States, was as follows:—

	Dollars.
1st, 72,000,000 gallons of ardent spirit, at 66 $\frac{3}{4}$ cents....	48,000,000
2nd, 100 days' labour, of 375,000 drunkards, lost, at 40 cents	15,000,000
3rd, 10 years' labour, of 37,500 men, killed by ardent spirits, at fifty dollars per annum for each man.....	18,750,000
4th, $\frac{3}{4}$ of the cost of crime to the United States	6,525,000
5th, $\frac{3}{4}$ of the cost of pauperism to the United States	2,850,000
6th, $\frac{3}{4}$ of the amount of private charities	2,850,000
7th, $\frac{3}{4}$ of 1 years' labour of 1200 prisoners lost, at fifty dollars	450,000
<hr/>	
The annual loss to the country by the use of ardent spirits was	94,425,000

In this estimate, remarks Judge Cranch,

no account is taken of the loss of the labour of the paupers, prisoners confined for debt, nor of the cost of litigation created or excited by the use of ardent spirits, nor the salaries of judges, the expenses of jurors, nor of the fees of counsel.

An annuity of ninety-four millions of dollars, remarks the same learned judge, would, in twenty years, with simple interest only, at six per cent. per annum, upon each years' annuity, from the time it became payable to the end of the twenty years, amount to 3,064,800,000 dollars. The valuation of all the lands, houses, and slaves, in the United States, in the year 1815, exclusive of Virginia, South Carolina, and Tennessee, who agreed to pay their quotas of the direct tax, without a valuation, was

	Dollars.
	1,479,735,098 45—100
If we add for Virginia	200,000,000
South Carolina ..	48,862,192
Tennessee	42,715,618

The aggregate will be 1,771,312,908 45—100

If we suppose the value to have increased since 1815, in proportion to the population, the then value of all the houses, lands, and slaves in the United States, was 2,519,009,222 dollars. According to this careful estimate, *the amount annually lost to the country by the use of ardent spirits, would be more than sufficient to buy up all the houses, lands, and slaves, in the United States once in every twenty years.*

IV. *Evils resulting to national morals from intemperance.*—1. *General examples in past times.*—The influence of intoxicating liquors on the morality of a nation, has been much the same in every clime and among every people. An age of intemperance has been invariably characterized by exhibitions of vice, the most disgusting in its nature, and the most fearful in its consequences. The pages of sacred and profane history present humiliating examples of this nature; and those instances have been found to be more or less injurious in their consequences, in proportion to the consumption of intoxicating liquors. The condition of the ancient Greeks, the Romans, and other nations, who were accustomed to indulge in the use of strong drink, exhibits sufficient evidence of this fact. The history of the British nation abounds in similar examples.

Maitland relates some striking illustrations which took place in the year 1575. “The Lord Chancellor Bacon, having taken into consideration the best means of removing the evils which existed at that period in London, in conjunction with the Lord Mayor, and the Records of Southwark and Lambeth, with whom he communicated, put down above two hundred ale-houses in their several jurisdictions. This example was followed in Westminster, the Dutchy of Lancaster, the Liberty of the Tower Hamlets,

and other parts of Middlesex contiguous to London. At this time," says Maitland, "the city appears to have been under a better regulation than perhaps it ever was at any other time before or since, for during the absence of the court (to which circumstance he partly attributes this reformation of morals) the lord mayor, recorder, and other magistrates, did so effectually exert themselves in putting the laws into execution against vice and immorality, that at the assizes then held for the City of London, there was not one single criminal to be tried."*

The celebrated, learned, and pious Judge Hale, who flourished in the seventeenth century, made the following statement concerning immorality occasioned by intemperance in his time; a statement, which will be found to describe the character of the present age:—"The places of judicature which I have long held in this kingdom, have given me opportunity to observe the original cause of most of the enormities that have been committed for the space of near twenty years; and by due observation, I have found, that if the murders and manslaughters, the burglaries and robberies, the riots and tumults, the adulteries, fornications, rapes, and other enormities, that have happened in that time, were divided into five parts, four of them have been the issues and product of excessive drinking, at taverns or ale-house meetings."†

Crime increased to a great extent during the unusually extensive use of spirits in Great Britain, in the latter part of the last century.

Maitland states, "that the morals of the populace of London, were debauched to such a degree, that many of the petty shops, or places where these destructive liquors were sold, were nurseries of whores, thieves, sodomites, and the most abandoned miscreants."‡

In Ireland, frequent and open acts of insubordination resulted from the same cause. During several attempts to suppress the illicit preparation and sale of spirituous liquors, serious riots were of common occurrence. The report of the commissioners appointed to investigate the subject, states, that some parts of Ireland had been absolutely disorganized and placed in opposition, not only to civil authority, but to the military force of government. The report then proceeds to state, that the profits to be obtained from the evasion of the laws, had been such as to encourage individuals to persevere in these desperate pursuits, notwithstanding the risk of property and life with which they had been attended. At this period, the annual consumption of ardent spirits in that country, according to the

calculations of the commissioners, was not less than *ten millions of gallons!*

In 1764, the Irish Parliament, among other evils to which it adverted, as arising from the general use of ardent spirits, stated, in a resolution which passed the House, "*that all the riots and combinations of late so frequent, are to be principally attributed to the same cause.*"*

About this period, in the examination of witnesses before the "*Grand Committee of Trade*," it was observed, that one great cause of the idleness of the people, was the too great use of spirituous liquors; "that it was the principal cause of the *riots and tumults* in the city; and that *the people did not seem to be the same race of people they were twenty years ago.*"† At that period multitudes of petitions were presented both to the Irish and English Parliaments, setting forth the immorality and crime occasioned by the use of strong drink.

One of these, presented in 1786, represents the wretched state of the people in consequence of the cheapness of spirituous liquors, and the facilities afforded for the purchase of them by the Legislature. "The temptation being offered to the people in every street by the multitude of dram-shops and public-houses, licensed for this purpose, they soon became weak, diseased, and disabled, unfit for labour, useless to the state, and burthensome to the community for support, which, if refused, they endeavour to obtain by theft, or robbery; that the petitioners presume to apprehend, that whatever revenue may arise from this practice, it cannot compensate the loss which trade, manufacture, and the public at large sustain, by the decay of the health, strength, and population of the working classes, and the immorality, debauchery, and wickedness of every kind which is upheld and cherished by it."‡

The effects of spirits in producing crime and acts of violence, are well illustrated by certain circumstances which attended the insurrection in 1798. The leaders of that movement (previously to the breaking out of the rebellion) endeavoured, by every means in their power, to prevent the "United Irishmen" from drinking spirituous liquors, fearing lest they would break out into acts of *premature violence*. In order to promote this object, they circulated a *pledge of abstinence from spirituous drinks*. When the necessary arrangements had been completed, these restrictions were removed, and in the years 1797 and 1798 (the period of the rebellion) the consumption of spirits was nearly one-fourth greater than it had been for two years before, or even was in the two years which succeeded its failure.||

* Irish Commons' Journals, vol. vii. p. 310.

† Evidence before Irish Commons, Commons' Journals, vol. x. Appendix 113.

‡ Irish Commons' Journals, 1786, vol. xii. p. 53.

|| Inquiry into the Influence of Spirituous Liquors, p. 43; also Parliamentary Reports, 1797-8.

* Maitland's London, book i. p. 158, Edit. 1759.

† Sir M. Hale's Advice to his Grandchildren.

‡ Maitland's London, book i. p. 350.

2. *Effects of intemperance on morals in the colonies and other possessions of Great Britain.*—The safety and peace of New South Wales was jeopardized from the same cause towards the latter end of the last century. For a considerable time, disorder reigned in that part “through the culpable dealings” of the officers of the New South Wales corps, who were allowed “to retail spirits; their dissolute habits, and abuse of the means entrusted to their management, rendering the resources of government indirectly subservient to their own private interests.” These, according to Dr. Lang, “entailed ten thousand sorrows on the Colony.” Fearful insubordination was the consequence of an attempt which was made to put an end to this pernicious monopoly. The governor was, in the most daring manner, put under arrest, and the lawful government, for the time being, suspended. At that period, labour and the necessities of life were paid for in ardent spirits, and this mode of barter was adopted by all classes in lieu of currency.* The consumption of spirituous liquors in that Colony, at the present period, is fearful in the extreme, and forms the greatest obstacle to its improvement and success.

A recent number of the *Colonist Newspaper*, states it to average not less than five gallons and a quarter *per annum*, to every living soul of a population of eighty thousand, including women, children, and convicts; to say nothing of wine, beer, and cordials; the quantity of spirits *in bond*, at that time, being no less than four hundred and twenty-two thousand five hundred and twenty-six gallons.

The various books published in reference to the state of this colony, teem with accounts of the immoral condition of its inhabitants, which exists in proportion to the consumption of ardent spirits. It is stated on indubitable evidence, that “the drunkenness, idleness, and carelessness, of a great proportion of the inhabitants of Sydney, afforded innumerable opportunities and temptations, both by day and night, for those who chose to live by plunder.” And again, on the same testimony:—“More immorality prevailed in Sydney, than in any other town of the same size in the British dominions; there the vice of drunkenness had attained its highest pitch: the quantity of spirits consumed was enormous; even throughout the whole of New South Wales, the annual average for every human being in the colony, had reached four gallons a head. With a free population, little exceeding sixteen thousand, Sydney contained two hundred and nineteen public-houses, and so many unlicensed spirit-shops, that its chief police magistrate felt himself incompetent to guess at the number. The greater portion of these public-houses were kept by persons who had been transported convicts, and who were notorious drunkards,

obscene persons, fighters, gamblers, receivers of stolen goods, receivers and harbourers of thieves, and of the most depraved of both sexes; and who exist upon the depravity of the lower orders.”*

Sir W. Molesworth observes, “to dwell in Sydney would be much the same as inhabiting the lowest purlieus of St. Giles’s, where drunkenness and shameless profligacy are not more apparent than in the capital of Australia.”†

In South Australia is witnessed the same prolific cause of vice and distress. “The vice of drunkenness,” says Judge Jeffcott in his first charge to the grand jury, “prevails here to an alarming extent.” “Men,” observes one correspondent, “work about two or three days of the week, and drink the remainder.” “Sottishness,” writes Mr. Stowe, “prevails over the lower orders, and irreligion over the mass.” “Spirit drinking,” says Mr. Gouger, “is carried to a lamentable excess in the province. Most labourers try to make it a stipulation with their masters, that they should be allowed a fixed quantity of rum a day, and a worse habit, perhaps, neither master nor servant can adopt.” A labouring man writes in the following strain.—“Pray tell whoever thinks of coming out, they must make up their mind to be sober, as liquor being so cheap here, it is the destruction of many; it is quite dreadful.” A colonist of this settlement, in one of his communications, states as follows:—“I do not hesitate to say, that of the greater number of those who do not succeed in this colony, their want of success may be generally attributed either to idleness or drunkenness, or both.”‡ The present colonial treasurer imports large quantities of rum into the colony, thus patronizing a vice, “which absorbs, as in a bottomless gulf, those surplus wages, which it has been calculated would be expended in the purchase of land, and consequent increase of emigration.”||

The same national curse has proved the greatest hindrance to moral improvement, and the most fruitful source of demoralization in most of those colonies which belong to the British empire. Reference, in particular, may be made to New Zealand, the South Sea Islands, and British Guiana. Concerning the former, Mr. Ellis, the missionary, states, that “the demoralization and impediments to the civilization and prosperity of the people that have resulted from the activity of foreign traders in ardent spirits, have been painful in the extreme;” adding, that in Tahiti alone, in one year, the sum of 12,000 dollars was expended in spirituous liquors. In New Zealand, scenes of drunkenness are of daily, and even hourly occurrence; and the immorality occasioned

* Report of Sir W. Molesworth’s Committee on Transportation. † Ibid.

‡ South Australian Gazette, 1840.

|| Stephens’ South Australia, p. 132.

* Dr. Lang’s New South Wales.

thereby, is in the highest degree alarming. Mr. Williams, the missionary, gives it as his solemn opinion, that European intercourse with these savages, has been with few exceptions, "decidedly detrimental, both in a moral and civil point of view."

"In British Guiana," writes a valuable journalist, "the Indian population is acknowledged to have been diminishing ever since the British came into possession of the colony, and especially within the last eight or ten years. This diminution is attributed, in some degree, to the increased sale of rum, which formed a part of the presents distributed by the British government, which has made no effort whatever to convert them to christianity."*

"All reports agree in stating that these tribes have been almost wholly neglected and retrograding, and are without provision for their moral and civil improvement."†

"The facility of obtaining ardent spirits," says an able writer, in reference to Prince Edward's Island, "and the free use made of them, operates here, as in all our other colonies, as a serious drawback on their morality and prosperity."‡

The same observations will apply to the North American Indians, the aborigines of New Holland, and to all the savage tribes, who have had the misfortune to be in anywise connected with European and other civilized nations.

Contrast with these facts the condition of the inhabitants of Greenland and Iceland. Captain Parry, in his voyages to the Polar Regions, says, "It is owing to the total absence of intoxicating liquors, that the Greenlanders are so little addicted to brawling and fighting, and can bridle their resentments with such stoical firmness."

M. Gaymard, and M. Freyeinet, who not long ago were engaged in a voyage of scientific discovery to Iceland and Greenland, recently furnished the Academy of Sciences with the following, among other interesting facts:—With a population of fifty thousand, there have been only four murders committed since the year 1786; and since A.D. 1280, or for almost six centuries, the island has not been subjected to the slightest increase of taxation.

An appeal, however, need not be made to foreign nations for evidence of the demoralizing effects of intoxicating liquors. Our own, unfortunately, presents too many appalling examples. A larger proportion of the crime, and every other species of immorality which exists in this kingdom, may be directly traced to this cause; among which may be included, as not the least baneful in its influence, a very general disregard of religious principles. The moral and religious principles of a nation have a powerful effect upon its prosperity. Where there is no sound morality, there can be no

true religion; and a nation destitute of both morality and religion, is a disgrace to human nature, and an enemy to God.

3. *Effects of intemperance in the present day in the production of dishonesty and crime.*—The records of our own and other countries, exhibit an inseparable connexion between intemperance and crime. Volumes might be filled with appropriate illustrations; the confined limits of this volume will admit of a selection only.

Intemperance is the chief cause of *dishonesty and breaches of trust*. It operates in various ways in producing this result. In Part ii. of the Sixth Report of the Inspectors of Prisons, published 1841, which relates to the prisons in Scotland, Northumberland, and Durham, Mr. F. Hill states the following interesting facts. "The passion for drink not only tends to produce a great deal of crime by lowering the power of the person affected by it to earn an honest livelihood, and at the same time by increasing his necessities, but apparently, also, in some cases, *by exciting dormant feelings, which, at ordinary times have no influence, but which, when thus roused into action, appear to urge the individual to steal or to commit any other offence to which he is inclined for the mere gratification of a temporary desire, without reference to any benefit to be obtained.* I have occasionally found persons, who, under the excitement of intoxicating drink, appear to have an uncontrollable desire to steal, apparently for the gratification of a kind of passion, the value of the article stolen seeming to be a matter of little concern. The matron of this prison stated that she knew many instances of the kind, and she mentioned one in particular of a woman, who had been in prison three times. The matron described her as a hard-working, civil, obliging, and clever woman; and said, that when sober, she always gave satisfaction to her employers; *yet when she had drunk what others would call a mere trifle, such a desire to steal seemed to seize her, that she could not restrain herself.* The woman had never been known to steal any thing of greater worth than what she could pawn or sell for a penny! The last time she was convicted, she was sentenced to imprisonment for eight months. During this period she worked so well and so cheerfully, was so neat, brisk, and clean, that when she left the prison, some months since, the matron said, she could not help remarking to the governor, 'we have lost our greatest ornament.' The matron met her a short time ago, and heard, with pleasure, that her employers had taken her back again, and that she was doing well. She assured the matron that she had not taken a single glass of spirits since she left the prison." This fact is exceeding important, inasmuch as it shows that the use of strong drink has a direct tendency to induce acts of dishonesty, to excite in fact, "*dormant feelings which*

* Asiatic Journal, 1837, p. 90. † Ibid.

‡ Col. Bouchette's British North America.

at ordinary times have no influence," and which free from all foreign and unnatural influence, would have continued undeveloped and restrained.

Mr. Poynder observes that intemperance is the fruitful source of *breaches of trust, and leads to perpetual violations of confidence*. Most of the cases of embezzlement which he had known in his official situation, were referable to drinking: such prisoners had told him that the first temptation to abuse the confidence reposed in them arose from the necessity of supplying themselves with liquor, and that when once the first barrier between honesty and fraud was passed, all afterwards became easy, and they went on without repugnance, until detection had ensued. "Most men in my own profession," adds Mr. Poynder, "can, at least, confirm this fact, that drinking is the bane of multitudes in it, who would be otherwise valuable in that particular department, and useful members of society. The law-writers especially, are almost universally addicted to drinking, as every law-stationer can testify; and a person who makes it his business to provide situations for law-clerks, and who has had great experience among all classes of them, assured me that cases of violated trust, arising from their habit of drinking, were constantly occurring, and that it was impossible to enumerate the instances of forfeited character and of individual suffering, which this source of expense and crime had brought under his own observation. In other professions and trades many examples of violated trust, from this cause, must be familiar to every one: mercantile clerks, apprentices, and shopmen, in order to supply their desire for this pernicious ingredient, have, in repeated instances, become criminals for life. Servants, both male and female, have first robbed their masters and mistresses in order that they might procure liquor; their character then gone, they have fallen in consequence, from bad to worse."*

The same gentleman states, that in many cases, where a prisoner was not under the influence of liquor at the moment of committing the crime, such, for example, as forgery, he has been able to trace such previous habits of drinking as left no doubt on his mind that this was the master-vice which, while it was expensive in itself, involved him also in various other expenses, which were unitedly beyond his means of supporting, and induced him to have recourse to the crime of forgery for their supply.†

In the seven years, from 1812 to 1818, the Parliamentary returns show, that there were committed, for criminal offences, in England and Wales, sixty-four thousand five hundred and thirty-eight persons; and for London and Middlesex alone, fourteen thousand five hundred and ninety-eight

persons. The number of persons sentenced for transportation for the same period, was for England and Wales, thirteen thousand one hundred and sixty-seven, and for London and Middlesex, four thousand and sixty-five. In the seven years, from 1804 to 1810, the maintenance of convicts at home and abroad, was no less than £528,716 or £75,530 annually. In the period, however, from 1811 to 1817, the sum was nearly double, it being £985,371 or £140,765 annually. The expense of seven police offices during the same periods was, for 1804 to 1810, £163,839 and annually £23,405. For the next seven years, however, from 1811 to 1817, the amount increased to £186,724 or annually £26,674.

In a period of seven years, from 1819 to 1825, the number of persons committed for criminal offences in England and Wales, increased from sixty-four thousand five hundred and thirty-eight, in the previous seven years, to ninety-three thousand seven hundred and eighteen; and for London and Middlesex, from fourteen thousand five hundred ninety-eight during the same period, to eighteen thousand five hundred and nine; each being an increase of more than thirty per cent. A proportionate increase also took place in the number of convicts for transportation. The expense of maintaining convicts, during the same periods for England and Wales, was from £985,371 to £1,319,295, being an increase of £47,703 annually. For London and Middlesex, the increase was still more remarkable, being from £186,724 to £292,112.

In the period between 1826 and 1831, the evidence as to the demoralizing influence of strong drink, is prolific and lamentable. The reduction of duty on spirits in 1826 was attended by an increase of consumption in England of British spirits, of more than one hundred per cent. In 1825, the consumption was four million one hundred and thirty-two thousand two hundred and sixty-three gallons; in 1826, it reached to the enormous increase of nine million three hundred and eleven thousand six hundred and twenty-four gallons. The total consumption for the last six years, was only twenty-seven million seven hundred and ninety-nine thousand three hundred and sixty-seven gallons, whilst for the present period, it was fifty-three million six hundred and forty-six thousand four hundred and thirty-six gallons. The decrease of duty was not one half, and the consumption nearly doubled, so that there was an increase in the whole revenue of £4,876,365, and of which England's share was £1,659,589.

The effects of this state of things on the poor rates, was as follows:—In 1825 the amount levied, was £5,786,989. A gradual increase took place each year until in 1831 they reached £6,798,888.

The influence on crime was equally lamentable. The number of persons committed

* Parl. Evid. Appendix. p. 418.

† Ibid. p. 419.

for criminal offences in England and Wales, increased from ninety-three thousand four hundred and thirty-two, in the last period, to one hundred and twenty-eight thousand and ten persons, in the present six years. For London and Middlesex, the increase was also about thirty-three per cent., being in the last period eighteen thousand five hundred and nine, and in the present, twenty-four thousand five hundred and sixty-four. The number of convicts increased at the same ratio, being for the previous six years for England and Wales, twenty thousand six hundred and fifteen, and the present, thirty-one thousand four hundred and thirty-two, and for London and Middlesex for the last period, five thousand three hundred and thirty-three, and for the present, seven thousand eight hundred and twenty.

The expenses of crime were increased in proportion to its extent. For the seven years ending 1824, the amount was £1,319,295; for the seven years terminating 1831, the cost was £1,390,701, leaving an increase only of £71,406, while during the last period the increase was £333,924. Several adventitious circumstances tended to create this large increase. The expenses of the seven police offices during this period, however, were greatly augmented, having been in the last period £292,112, and in the present £478,365.

These statistics substantiate the evidence laid before the select committee on drunkenness, that "crime and pauperism have increased in the same proportion to the increased consumption of distilled spirits, and in a much larger ratio than the population of the United Kingdom." A series of elaborate tables are published, in the evidence of the committee, from which the above statistics have been carefully selected.*

The increase of crime has greatly exceeded the increase of population. In 1821, the population of England, Scotland, and Wales, was fourteen million seventy-two thousand three hundred and thirty-one; in 1831, it was sixteen million two hundred and sixty thousand three hundred and eighty-one, being an increase of two million one hundred and eighty-eight thousand and fifty. From this it will appear that the population has augmented in the proportion of two to sixteen, or about one-eighth. The increase of crime, however, is as nine to twenty-five, or about three-eighths, thus being full one-fourth greater than that of population.

Some statistics laid before the British Association for the Promotion of Science, held in Liverpool, 1837, exhibit very strongly the connexion between intemperance and crime. The returns as to the number of persons charged with offences, committed in England and Wales at various periods, show that whilst the population had only increased eighteen or nineteen per cent. in twelve years,

crime had increased in the proportion of ninety per cent., that is *five times the rate of increase in the population*. In 1835 the number of individuals charged with offences, was in England and Wales, one in six hundred and nineteen; in Bristol, one in two hundred and ninety; in Middlesex, one in three hundred and thirty-six; in Lancashire, one in four hundred and eighty-one; in Cheshire, one in four hundred and ninety-two; in Anglesey, one in eight thousand!

The quantity of ardent spirits consumed in the United Kingdom in the year 1817, was *nine million two hundred thousand gallons*; in 1827, *eighteen million two hundred thousand gallons*; in 1837, *twenty-six million seven hundred and forty-five thousand gallons*. Thus it appears, that whilst the population had only increased thirty-three per cent. in twenty years, the consumption of spirituous liquors had been *trebled* within the same period. Taking the whole kingdom, the proportion of spirits consumed was, in 1820, one gallon annually to each inhabitant; in 1833, it was one gallon and a half.

In addition to this startling and lamentable consumption of ardent spirits, we must take into consideration another potent, if not equal or superior, cause of crime, particularly in agricultural districts—the general and extensive use of fermented liquors. The number of licenses taken out for beer-shops in 1835, was thirty-nine thousand six hundred and fifty-four; in 1836, forty-four thousand one hundred and thirty; and in 1837, forty-five thousand three hundred and ninety-four.

An increase of crime took place soon after the new beer act came into operation. It appears, from a statement made by Lord Melbourne, that from the year 1821 to 1827, the increase of crime was at the rate of twelve per cent., whereas from the year 1827 to 1833, it had increased at the rate of thirty-one per cent. About or during the latter period, the establishment of beer-shops, as well as a great reduction in the duty on spirits, took place.*

Parliamentary returns for 1836 state that in twenty-three agricultural counties, possessed of the largest agricultural population, crime has increased to a most alarming extent. In some cases this increase was *twenty*—in others, even *thirty-two* per cent. The numerous beer-shops, opened in various parts of the country, have proved nurseries of thieves and other wicked persons, and have fully shown that crime increases in proportion to the number of licenses granted for beer and spirit-shops; in other words, in proportion to the facilities afforded for obtaining inebriating compounds.

Henry Pownall, Esq., one of the Middlesex magistrates, asserts, that "the greater portion of the crimes which have been com-

* Parl. Evid. p. 316.

* Parl. Evid. p. 162.

mitted, especially in the country districts, have been planned and concocted in the beer-shops." Lord Francis Egerton, "considered the system as productive of enormous evils." "No bill had ever been more productive of drunkenness and immorality, than the sale of beer act." Lord Dungannon "considered beer-shops as places where crimes of the deepest die, such as highway robbery and deer stealing, were concocted." Reflecting individuals foresaw these consequences, from an act which all parties now admit to have been injurious to morals and productive of much crime. Robert Chambers, Esq., one of the police magistrates of London, says he has no doubt that crime has increased more rapidly since the establishment of beer-houses.* The same gentleman remarks, that "since the passing of the beer act, the places for the sale of spirits have greatly increased," and that "besides the sale of beer, they permit and encourage the sale of spirits, which are frequently mixed with beer."† Mr. Capper, of Bristol, also informs us, that the habit of mixing spirits with beer is extensive, and that "of late years, since the passing of the beer act, the secluded villages have become much more intemperate than they were."‡ W. A. White, Esq., seventeen years magistrate of Queen Square Police Office, states, that intemperance prevails more among the lower classes of the population now than seventeen years ago, which he attributes very much to the beer act and to the opening of public-houses all night.|| John Twells, Esq., states, that he has no doubt that the increase of beer-shops very considerably increases the consumption of ardent spirits.§

The Sheffield Iris of 1834 states the following additional corroborative fact. One of the magistrates of that town at a public meeting stated, that from the 1st of October 1830, when the beer act took effect, till the ensuing year, no fewer than three hundred new beer-shops had been opened in Sheffield; and it was a striking fact, that during that period, no fewer than one hundred and ten of them had applied for spirit licenses. "Such was the increased desire for spirits, formed, as they believed, by the increased facilities of obtaining beer."¶

These, and other similar facts, prove the position made in an early section, that the use of the more mildly intoxicating liquors, creates an appetite for stronger stimulants. Abundant facts in corroboration of this position, present themselves to our notice in the present day.

The drunkenness of the iron districts in Wales, Staffordshire, and Shropshire, arises almost entirely from the use of malt liquors. In many parts of the manufacturing districts, five-sixths of the intoxication is also caused by ale and beer. In Preston and its neigh-

bourhood we find the same results. In the same districts it is found that a decrease in the consumption of malt liquors is attended with decreased crime.

The evidence that a great proportion of the crime committed in this and in other countries is attributable to intemperance, is strong and conclusive. Some examples in point are now adduced.

"The evil of drinking," says Mr. Poynder, "lies at the root of all other evils, in this city, (London) and elsewhere. I have long been in the habit of hearing criminals refer all their misery to this source, so that I now almost cease to ask them the cause of their ruin."

The late Mr. Wontner affirmed that "ninety-nine out of every hundred prisoners that came to Newgate, committed their crimes in consequence of intemperance."

"The increase of crime in Manchester," says the Rev. C. F. Bagshaw, chaplain to the gaol, Salford, "I attribute to the increase of intemperance; and I should say as to the cause of crime, perhaps four-fifths of those brought into the gaol are brought in by intemperance."

Mr. Clay, in an abstract of a report of seven hundred and twenty-three persons confined in Preston gaol, of which he is the chaplain, states, that three hundred and seventy-five, or fifty-two per cent, arose directly from drunkenness. Mr. Clay further states, that if all the particulars connected with the guilt of criminals were made known, or if we were acquainted with their general habits, drunkenness, which now accounts for fifty-two per cent. of the offences, would manifest itself as being little short of the universal cause of criminality.

The Rev. E. Faulkner, chaplain of the City gaol, Worcester, in a late report of the state of the prison, presented to the town council, says "very few cases have occurred within the past year of which drunkenness, or an excessive fondness for intoxicating liquors, has not been the direct, or the approximating cause. Many, in a state of inebriety, and others, for the sake of procuring the means wherewith to indulge in it, have committed the offence which assigned them to prison."

In a Report presented to the magistrates of the county of Lancaster, by the chaplain of the jail, he states, as the result of personal inquiries of the numerous prisoners, of the causes which led to the commission of the offences, he had discovered, that "the passion for liquor was a source of ruin and disgrace, more fruitful than every other cause combined;" and that "of one hundred and eighty-nine offenders of all descriptions, there were one hundred and sixteen who imputed their misfortunes, or their crimes, to the temptations held out to them, by the ale-house and the beer-shop."

Mr. Stephens, superintendent of the Newcastle police, states that out of two thousand

* Parl. Evid. p. 115.

† Ibid. 115. ‡ Ibid. 132. || Ibid. p. 292.

§ Ibid. p. 301. ¶ Ibid. p. 167.

one hundred and sixty-nine persons who had passed through the office in ten months, seven hundred and fifty-two, or more than one-third of the whole number, were for drunkenness and assault. He further gives it as his opinion that, as far as his experience went, criminal offences were generally traceable to intemperance.

"*Simple larcenies, felonies, and common assaults,*" remarks Sir Richard Birnie, the chief magistrate of police, in 1828, "have increased to a very great degree; burglaries have also increased. I attribute this to increased population, want of employment, and, though last, not least, *cheap spirits*. I am afraid that depraved character creates the greater number of crimes more than mere want of employment. A great deal is owing to drunkenness, that every human being must observe in the streets, since gin is so cheap. In the next licensing bill I hope it will be looked to."

Mr. Baron Garney, in his charge to the grand jury, at the Chester assizes, remarked, "Crime would be diminished, if that one vice of drunkenness could be suppressed. In a county next adjoining to this, it was my pain to observe that in one of the blackest calendars I have ever seen, not less than one-third of the crimes were to be ascribed to the influence of intoxication."

At a recent York spring assizes, Baron Alderson observed, "if they took away from the calendar all those cases, in which drunkenness had some connexion, either with the person accused, or the accusing party, it would leave that large calendar a very small one." On another occasion the same judge said, that "if all men could be dissuaded from the use of intoxicating liquors, his office, and that of the other judges, would be a sinecure."

At the assizes held in Liverpool, 1837, there were between sixty and seventy prisoners in the calendar, *all of whom, except three or four, were committed for crimes arising from drunkenness*. Four men were convicted on one day, of having killed their wives, each of the women being at the time in a state of intoxication. Three were sentenced to be transported for life, and to work in chains; and the fourth to be imprisoned four years. In passing sentence, the learned judge (Alderson) alluded to the great number of cases arising from drunkenness. He hoped that all present would take warning from the example of the unhappy men, and that they would resolve, from that moment to the end of their lives, *to abstain from all intoxicating liquors*.

The judge presiding at the Glasgow circuit, not many years ago, declared, that all the cases which had come before him had their origin in the use of ardent spirits. A similar declaration was made at one of the circuits at Perth.*

In the second report of the inspector of prisons, Scotland, it is stated, in reference to crime in Clackmannanshire, "there appears to have been a great increase in the number of petty thefts and assaults in this county, during the last twenty years, even after allowing for the increase of population; and there does not appear any corresponding decrease in the number of other offences. The increase that has taken place is attributed to an increase of drunkenness, which is believed to have been caused by the cheapening of whiskey. Most of the offences are committed by young persons, between the ages of ten and twenty. Almost all the assaults arise from drunkenness, and many of the thefts proceed from the same source, whiskey being often the very article stolen; and when not, the means of procuring whiskey is often the object in view. Much of the poaching also, may be traced to drunkenness, which has so much increased of late years."

The following extract is from Mr. Hill's Law Report on Prison Discipline of Scotland, recently published:—"Of all immediate causes of crime and offences in Scotland, *drunkenness is by far the most potent*. A considerable portion even of the thefts are committed under the excitement of whiskey, and the desire of obtaining this liquor is the cause of many others. And again, the means of committing a robbery are often afforded by intoxication in the person robbed. This is particularly the case with thefts by prostitutes—a numerous class of thefts, and one including robberies of large sums of money. As for assaults, they almost invariably spring from drunkenness. On my inquiring of Mr. Henderson, the Procurator-Fiscal for Caithness—a county abounding in assaults—on this point, his expressive reply was, 'Sir, I never knew a sober assault.'"

Captain Wilson, superintendent of the Glasgow police, states, that, at least two-thirds of the cases brought into that court arise from intemperance. Baillie Paul, chief magistrate of Gorbals, (Glasgow) affirms that the criminals brought before him were nearly all drunken cases, and that a large proportion, more than three fourths every day, arose from drunkenness.

The history of distillation in Ireland presents similar effects.

During part of the year's 1808, 1809, and 1810, a prohibition to the use of corn in distillation took place, and the consequence was a diminution in its consumption, and a visible improvement in the morals of the people. In 1810, the prohibition being removed, an increased consumption of whiskey took place, and disorder and riots again became frequent.

The following Report of the police offices in Dublin, for four years, in two of which the distillation of spirits from corn was again prohibited, will present this in a more forcible light.

* Rep. Scottish Temp. Soc. p. 21, 1831.

Years.	No. of prisoners.	
1811.....	10,737	} Distillation prohibited.
1812.....	9,908	
1813.....	8,985	
1814.....	10,249	

Thus reducing the number of criminal cases nearly one-fifth, although it took place in a time of great distress from poverty, and when it might be expected that much insubordination would have been displayed.*

The keeper of a large house of correction in Ireland, stated to Professor Edgar his conviction, founded upon long experience, both in the army and police, that four-fifths of persons confined for crimes in gaols, have been led forward, and hardened into crime, by the use of spirituous liquors.

A barrister, who, some time ago, tried one thousand seven hundred civil bill cases in a fortnight, states it as his opinion, that the whole of them, either directly or indirectly, were attributable to the use of spirituous liquors.

Archibald Wilson, Esq., governor of Maryborough jail, states that nineteen-twentieths of crime is caused by intemperance.

Mr. Barrow, sheriff of Cork, states, that one thousand five hundred persons had come under his notice in the five months he had been in office, every one of whose crimes were occasioned by drinking.

Mr. T. Purdon, governor of the Richmond Bridewell, declared in 1839, that "since the 9th month, last year, there had been committed by the magistrates for riots, and confined in a new part of the prison, erected for the purpose, not fewer than two thousand persons, of whom 1870 (for he had kept an accurate account) were punished for crimes perpetrated in fits of drunkenness."

A Roman Catholic clergyman, who, some years ago, resided among the convicts in our penal settlements, in a work recently published, entitled, "Horrors of Transportation," expresses himself as follows:—"Were I asked what, next to the convict's ignorance of the horrors of the state on which he was about to enter, was the chief cause of transportation? I should reply, intemperance. Were I asked a second time, I should answer, intemperance. And were I asked the third time, I should still answer, intemperance; and so on, as often as the question was put to me."

The results of statistical investigations in the United States are equally strong and conclusive.

The report of the state prison, at Auburn, New York, contains the following calculation, during a recent period, for the space of one year, having reference to the "former character and habits of the convicts."—Total number of convicts in prison, six hundred and forty-six: number ascertained to be under the influence of liquor, during the

commission of the crimes, three hundred and forty-six.

In 1833, there were confined in New York state jail, nine thousand eight hundred and forty-nine persons. An equal number, in proportion to the population, would make in the United States, about eighty thousand. Nearly the whole of them drank habitually of this poison, and a great majority of them, more or less often, even to drunkenness.

Out of one thousand and sixty-one cases of criminal prosecutions in the year 1820, before the court of sessions, in the city of New York, more than eight hundred are stated to have been connected with intemperance.

The keeper of the Ogdensburg (New York) jail, states that seven-eighths of the criminals, and three-fourths of the debtors, confined in that prison, were intemperate persons.

The following statement is made from "Documents relating to the Massachusetts State Prison," and presented at the last session of the legislature of that state. Addicted to habits of intemperance, one hundred and fifty-six: ascribe their imprisonment to intemperate drinking, one hundred and twenty-two: state that their parents were in the habit of giving them ardent spirits, when children, one hundred and sixteen: parents, "one or both intemperate, fifty-four. This was the result of enquiry made of two hundred and twenty convicts.

The grand jury of Suffolk county, in their presentment, 1834, state, "during the discharge of their duty, it has become apparent that the great source of most of the crime which has come under their observation may be traced, directly or indirectly, to an excessive use of ardent spirits."

The keeper of the Ohio penitentiary, in his report to the legislature of that state, December, 1829, says that, of the one hundred and thirty-four prisoners under his care, thirty-six only claimed to be temperate men.

The sheriff of Washington county, states that out of twenty-four committals, twenty-one were caused by intemperance.

In Litchfield county, Connecticut, the proportion of criminals who are intemperate is thirty-five out of thirty-nine.

T. O. Cole, Esq., police justice of Albany, New York, states, that two thousand five hundred persons came under his cognizance in one year, and that ninety-six in a hundred of the offences were occasioned by intemperance.

Mr. Badlam, who was long master of the house of correction, in Boston, says of its inmates, that "three-fourths were habitual drunkards, and the remainder mostly intemperate."

Mr. Robbins, assistant master of the same place, says that, of five thousand six hundred and eleven persons, who were there, "with very slight exceptions, all were intemperate." Another account informs us, that of six

* Return's from the head office of police, Dublin.

hundred and fifty-three committed to the same house in one year, four hundred and fifty-three were drunkards.

In the annual report of Dr. Baehé, physician to the eastern State penitentiary, to the inspectors of the institution, we have the following important statement:—

“The physician has found that out of fifty-eight prisoners, received up to this time, thirty-four, or nearly two-thirds, acknowledge themselves to have been either habitually or occasionally intemperate. This fact shows the close connexion which subsists between the vice of drunkenness and the commission of crime.”

It appears from the report of the trustees of an alms-house, that of the nine hundred and ninety-two adults received into that institution the last year, (1831) not less than seven hundred and ninety-four were ascertained to be habitually intemperate; and that of one hundred and forty-two children born or admitted in the same time, one hundred and fifteen, at least, were brought to destitution by the drunken habits of their parents,

Of fifty-seven convicts in the Connecticut prison, the year preceding April, 1837, forty-two were intemperate, the expense of whose apprehension and conviction exceeded the sum of three thousand six hundred dollars.

Recent investigations in Kentucky, show that there are in that State twelve hundred licenses, granted by the county courts, and by the corporations of towns and cities, and two thousand four hundred places where spirituous liquors are retailed without license; making altogether three thousand six hundred places, or one grog-shop to every two hundred inhabitants, and the whole amount paid annually to these retailers of intoxicating drinks, exceeds two million dollars. The result of this state of things is, Kentucky has twenty-thousand drunkards, or six to every grog-shop, and one to every thirty-five inhabitants. *Three thousand six hundred crimes of various magnitudes, are annually prosecuted, of which from two thousand two hundred and fifty, to two thousand seven hundred, are chargeable to intemperance.* Five hundred paupers are also supported at a public expence of twenty-five thousand dollars, two-thirds of which is chargeable to intemperance

The following account of the convicts in Auburn prison, United States, up to the first of July, when it was taken, exhibits in a strong light the influence of intemperance upon crime.

The number of convicts was 757.

Excessively intemperate 287

Moderately intemperate 284

571

Temperate drinkers 177

Total abstinentes 9

757

Intoxicated when they committed crimes 448

Had intemperate parents or guardians 283

Similar tables will be found in that portion of this section which relates to intemperance and education.

The abstract returns of persons confined in jails and houses of correction, in the State of Massachusetts, state, that in 1835 the number confined for debt and for crimes was 1,234, of which number, 262 were temperate, and 963 intemperate.

The following is a summary of Mr. Chipman's visit to the jails and poor houses of the state of New York, in 1833, (excepting the city and county) for the purpose of ascertaining the connexion between intemperance, pauperism, and crime. *Whole number committed to the county jail*,—intemperate, three thousand eight hundred and eighty-eight; doubtful, one thousand and three; temperate, one thousand one hundred and fifty-eight. *Paupers in the poor house*,—by intemperance of themselves and others, five thousand eight hundred and seventy-four; doubtful, one thousand four hundred and two; temperate, one thousand one hundred and fifty-eight. *County tax levied in 1833*.—Whole amount, four hundred and ninety-five million four hundred and thirty-six thousand and fifty dollars; for the support of paupers, and the detection and punishment of criminals, three hundred and sixty-three millions three hundred and eighty-six thousand and seventy dollars. Committed to jail for whipping their wives and abusing their families, in 1833, three hundred and eighty-nine.

The number of *juvenile delinquents* from intemperance, and the influence of parental example on children, is a subject of paramount importance. The following statement of N. C. Hart, superintendent of the House of Refuge for Juvenile Delinquents, New York, will best illustrate this subject. Of one hundred and fifty-four delinquents committed to the House of Refuge last year, eighty-five were foreigners, or children of foreigners, and the remaining sixty-nine are of American parentage.

Character of the parents of children received into the refuge.—Parents who have been in bridewell, twenty-five; penitentiary, six; state prison, two; intemperate, four hundred and one; houses of ill-fame, nine; parents allowing children to steal, eight; parents receiving the avails of stealing, eight.

Ages of the children in the House of Refuge, 31st December, 1829:—

Boys.—one 8 years, two 9, six 10, fourteen 11, sixteen 12, nineteen 13, twenty-five 14, fifteen 15, twenty-one 16, six 17, three 18.

Girls.—one 8 years, two 9, four 11, one 12, six 13, seven 14, eight 15, five 16, four 17.

It will be noticed in the preceding statistics, remarks Mr. Hart, how large a

proportion of the parents of children sent to the refuge, are *intemperate*—more than *one-half* of the whole number; namely, of six hundred and ninety children received, the parents of four hundred and one drink ardent spirits to excess. The examination and histories of the children, furnish the melancholy fact, that upwards of one hundred and fifty children of both sexes, commenced stealing, and other vices, for the purpose of being furnished with the means to frequent theatres and to obtain rum. There are now *two children* in the refuge, (of the ages of twelve and fourteen years,) who were, previous to being sent there, in the practice of drinking from eight to twelve glasses of rum or whiskey daily, and one of them has drunk a *quart of ardent spirits* in a day, when they were successful in pilfering property, which could be exchanged for it, or which they could sell for the value of from twenty to thirty cents.

There are gangs of young boys, says Sir Richard Birnie, who entirely subsist on depredations; and there is a great consumption of spirits, by even children. They begin to drink very early—as early as ten and twelve years of age.

Children, remarks Mr. Faulkner, chaplain of the city gaol, Worcester, the offspring of dissolute and drunken parents, almost without a home—certainly without proper example, advice, instruction, correction, or parental care, are left, from a very early age to seek a precarious existence, how and where they can. The inevitable consequence is, that they grow up with a distaste for labour, and settled habits, and soon find their way to prison.

Mr. Samuel Herapath, of London, stated in evidence before the select committee on drunkenness, that he had seen children in a state of intoxication, by frequently accompanying their parents to the gin-shop. Spirits were given to them as if it were a part of their food. Indeed it is notorious, that in all large gin-shops, glasses are provided of an appropriate size for children. Need we wonder, then, that they acquire at an early age habits of intemperance and dishonesty?

Colonel C. Rowan informs us that it is not at all uncommon for children at the breast to be taken by women to the gin-shops, and have gin given them to drink, and if they are noisy it quiets them; and young children are sent with bottles to the gin-shops, and carry it home, and drink it on the way.*

“Children,” says the overseer of the parish of St. Margaret’s, Westminster, “are initiated to the drinking of spirits from their infancy.”†

This practice seems to be common in all parts of the United Kingdom, particularly in large towns.

In Scotland numerous examples are de-

tailed in the Report of the Temperance Society for 1831. At one place, drinking clubs were formed among boys belonging to a public work. In the house of a spirit-dealer, in another place, boys, from nine to twelve, were accustomed to get their gill or two gills on an evening. A third Report states, that boys are known to club together to obtain whiskey. A fourth person says, “I have seen boys, of ten years of age, drunk in the streets; and a fifth makes the following awful statement: “It is very common for young people here to meet together on the Sabbath, for the purpose of drinking spirits; and in some instances, they have gone the length in their profanity and blasphemy, to minister the dispensing of the Lord’s Supper.

Mr. Poynder informs us that he “cannot avoid referring a very large proportion (perhaps almost the whole) of *youthful depravity* to intemperance. In making this statement he does not wish to convey the idea that all those children who commit crimes are themselves drinkers, although, as he remarks, it will be found that almost all of them do drink from their early years; he wishes rather to state that the habits and customs of their relatives and friends with regard to drinking, are such that the children cannot but be depraved for want of some counter-acting principle to keep them honest and virtuous. The children have no home; are virtually deserted by their natural protectors and guardians, and, consequently, lose the advantage of moral instruction, of good example, and of salutary correction. Intemperate parents do not appreciate these habits in their children, and not only do they disregard their associating with vicious companions, by whom they are initiated into evil practices, but, in many instances, unnatural parents themselves are found the instructors of the children in crime, as well as participators in the plunder. “The fate of female children,” concludes Mr. Poynder, “in such families is still more deplorable, and it is only too well ascertained that the ruin of multitudes of females for life, takes place at so early an age as is perfectly shocking to humanity. In most of such cases I have found the parents to be the tempters and destroyers of their own children; indeed it is almost impossible that, without their connivance and consent, their children could become abandoned and depraved at so early an age;” and he thinks there is little hope of effecting an alteration in this lamentable traffic “so long as the parents are rendered insensible to their childrens’ interests by their own addiction to drinking.”*

One additional illustration only, of the influence of parental example on juvenile depravity. A female, the aunt of a most celebrated and distinguished vocalist of this

* Parl. Evid. p. 27.

† Ibid. p. 275.

* Parl. Evid. Appendix, p. 420.

country, became an habitual drunkard, the consequence of which was that she spent every farthing her husband had left her. Her intemperance caused her to neglect the whole of her family, and her children were made to care for themselves. There were four sons and three daughters. The four sons were sent on the wide world without protection, or instruction, or provision. They had to resort to any means they could devise to obtain a livelihood. The consequence was that all four of them were transported for picking pockets, and other similar acts. Two of the daughters also were transported, and the other was obliged to abscond. Mr. Herapath, who makes the above statement, informs us that for a long time he had the youngest of the four sons in his employment, and gave him five or six shillings per week. When the poor boy received his wages he was obliged to keep it himself, for if he gave it his mother she would immediately spend it in gin. A poor woman, out of charity, lodged him for sixpence per week. At this period he was twelve years of age. When on a visit to his mother, one Saturday night, the unnatural parent while he was asleep, robbed him of his last week's earnings, his shirt and coat, and spent the money and pawned the garments. The boy was so distressed as to be deterred from going to his employment on Monday. He naturally remonstrated with his mother. She advised him not to continue at this price, but go out and do better, and pick up what he could in the streets, that is, to pick pockets. The unfortunate youth followed her advice, and was taken up and ultimately transported. Mr. Herapath further states that the boy was of an excellent disposition, and would have done well, had not his miserable mother drawn him away.*

The subject of intemperance, as regards its influence on the young, is of vast and paramount importance. There are in the United Kingdom, not less than from 500,000 to 600,000 drunkards, most of them addicted to habitual intemperance. If we estimate this number at four hundred thousand, and suppose that each of these drunkards have three children depending on them for good example, and moral and religious instruction, it will be found that not less than one million two hundred thousand of our youth are every year brought up under the superintendence of the drunkard. The hopes of our country depend on the rising generation. If our youth be unsound, then alas for our nation's prosperity. With this consideration before us it is a lamentable subject for reflection that no cause contributes half so much to demoralize the young as the use of strong drink.

The *crime of murder* is another lamentable but frequent result of intemperance. The publication of almost every newspaper, is

sure to announce the perpetration of this dreadful crime as the result of intoxication. The influence of strong drink in impelling man to imbrue his hands in his fellow-creatures blood, has been dilated upon in a previous section. The extent of this influence is the object of the present investigation.

The solicitor-general of Ireland makes the following statement. "He had long been in the habit of prosecuting criminals at the bar of justice in Ireland, and he could state positively, that at least three-fourths of the criminals tried there, were led on to crime by intemperance. A person in the habit of visiting the cells of the condemned, informed him, that a condemned criminal had stated, that the plan adopted in the commission of murder was, to get hold of a man addicted to liquor, and having taken him to a public-house, and there plied him with spirits, gradually to reveal the plan laid for robbery and murder, and then to prevail on him to execute the fatal deed. First hints would be thrown out, and then more explicit statements made; and he who at first shuddered at the very thought of crime, would ultimately yield to the effects of liquor and persuasion, and consent to do the deadly act proposed."

The murder of the Italian boy, by Bishop and Williams, was perpetrated under the stimulating influence of ardent spirits. Mr. Poynder says, "nearly all the convicts for murder, with whom I have conversed, have admitted themselves to have been under the influence of spirits at the time of the act. Many of those who are tried throughout the country, are proved, on their trials, to have acted under the same influence."

Williams, previous to his execution at York, for the murder of Thomas Froggat, declared that he was "cut off in the prime of life, thirty years of age, through the diabolical crime of intemperance. Is there a drunkard before me," said he, "yea I see many. Let him go home and do so no more."

The Rev. D. Ruell, chaplain to the new Prison, Clerkenwell, declares that "murder, maiming, and other crimes, attended with personal violence, are for the most part committed under the excitement of liquor."

Nine persons were tried for murder at the Liverpool Lent assizes, 1838, every case of which originated in drinking. These illustrations might be multiplied almost to any extent.

Daniel Ryan who was found guilty at the Clonmel assizes, of murdering Thomas Thomson, before being executed, confessed that whiskey had been given him, to induce him to take away the life of a man who had never done him any injury. At a late assizes at the same place, there were above two hundred persons charged with violation of the law, forty-seven of these were accused of the crime of murder; forty-two of its perpetration, and five of aiding and assisting. The

* Parl. Evid. p. 304

judge referred to the maddening use of ardent spirits as the cause.

Twenty-two persons at Cork, and seventeen at Limerick, were confined for dreadful murders, in March, 1836, all occasioned by drinking. In 1764 the Irish House of Commons state, that "many murders which of late have been committed, are to be attributed to the excessive consumption of ardent spirits." R. G. White, Esq. states, that of twenty-two persons whose execution he attended, in his capacity of high sheriff, (of Dublin,) every one declared, "that drunkenness, and the breach of the sabbath, had brought them to that end."*

In America we find the same awful results of intoxication. It appears from accurate calculations, that the use of alcoholic drinks produces on the average, more than two murders every week. Judge Dagget, in his remarks previous to pronouncing sentence of death on Sherman, the man who murdered his wife and child, said, that during the last five years, he had witnessed ten trials for life, "and in eight of these, the acts done were the immediate consequence of drunkenness." Another judge says, "of eleven murders tried by me, all except one were occasioned by strong drink." A third remarks, of "eleven murders tried by me, all were occasioned by intemperance." A fourth, "of twenty murders prosecuted by me, all were occasioned by spirituous liquors." And a fifth affirms this appalling fact, "of more than two hundred murders committed in the United States in a year, nearly all have their origin in drinking."†

Such are the dreadful effects of the traffic in strong drink, a system countenanced and perpetuated by the legislatures both of this country and the United States.

The effects of intemperance in the production of disorder and crime in the army and navy, will be considered in that division of the present Section, which relates to its influence on affairs of public or national importance.

4. *Intemperance, sabbath-breaking and other profanities.*—Drunkenness, beyond all doubt, is the chief source of sabbath desecration. The sabbaths of Christian Britain, in large towns, often exhibit a greater amount of intemperate indulgence, than is witnessed on any other day in the week. Tens of thousands devote the day peculiarly set apart for the worship of the Lord, to the service of Bacchus; and scenes of boisterous revelry, and licentious indulgence, are too commonly witnessed during the evenings, in particular, of the first day of the week. It is probable, if not certain, that many hundred thousands of persons in the metropolis and its suburbs alone, during the sabbath, spend their time in gin-shops or public-houses. In the out districts of most of our large towns, numerous tea-gardens

are open, at which intoxicating liquors are vended, and musical attractions are provided for the entertainment of the visitors. Several thousand individuals commonly frequent one of these in London, and crowds of the sons and daughters of dissipation visit those in the neighbourhood of our provincial towns. Three hundred individuals have been known to enter *one* gin-shop in the metropolis in *one* hour, on a Sunday morning. Many public-houses, in particular those of a low description, secretly and in defiance of the law, harbour thieves, and prostitutes, and gamblers, during even the hours of divine worship; and even when such is not the case, hundreds and thousands of drunkards issue forth at the sound of the church bell, to blaspheme their Maker, to disturb the quiet and devotion of the sober and religious by their revelrous conduct, and often by their indecent acts, and still more indecent expressions, to render the passage to the house of God a matter of anxiety and danger.

The traffic in strong drink occasions gross neglect of sabbath duties in various other ways. The Saturday evening's debauch not only dissipates the hard-earned wages of the working man, but incapacitates him, both spiritually and physically, for the more exalted duties of the coming day. The drunkard is usually in bed, enervated and stupid, at the hour when the sober artizan with his well-clad family, is bending his way to the temple of God. Again; the improvidence of the drunkard not only prevents himself from being well clad, but denies his wife and children that suitable apparel which is necessary for their decent appearance at the house of worship. By this means great numbers of individuals are deprived of spiritual information and assistance, and ignorance, and indifference to religious exercises prevails throughout the land.

The nature of the malting system necessarily causes no trifling degree of desecration of the sabbath. Due attention to this process requires attendance on the Lord's day as well as on other days, and the great number of hands employed for this purpose, (calculated to be not less than forty thousand individuals in Great Britain) are prevented, for a portion of the day at least, from attendance at their places of worship. This result of the traffic has not hitherto received that consideration from the religious public which it eminently deserves. Banish strong drink from the community, and you remove the great cause of sabbath profanation.

Mr. Poynder, in relation to the *neglect of religion and its duties*, as induced by intemperance, remarks, "drinking induces contempt of the law of God, *especially the appointment of the sabbath*; hatred of the law of man, as imposing perpetual restraint upon crime, and neglect of the public institutions of religion, as hostile to a system of sensual indulgence, against which these

* Parl. Evid p. 266.

† Fourth Report American Temp. Society, 1831.

institutions bear constant testimony. Drinking furnishes incessant temptation to the breach of the whole divine decalogue, and to the violation of all human laws. It is connected with, and subsists by, a system which is as opposite to the requisitions of christianity, as error is opposed to truth, or light to darkness."*

Mr. W. Collins affirms, that in the large towns of Scotland there is in many places, double the drunkenness on the sabbath than any other day, as the police offices testify.†

A petition to the House of Commons, from the lord mayor, sheriffs, commons, and citizens of Dublin, in 1834, states, "that a large proportion of the vice and immorality which so generally prevail, originates in public-houses and grocers shops, being open for the sale of spirits and other liquors on the sabbath."‡

Mr. Hartley states, that in London, on Sunday, "the public-houses are occupied by guests and tipplers, in such a manner as to be a disgrace to a Christian country."§

Last Sunday morning, says a gentleman in his examination before a Committee of the House of Commons, I had occasion to walk through the Broadway; at a few minutes before eleven o'clock, I found the pavement before every gin-shop crowded; just as church time approached, the gin-shops sent forth their multitudes, swearing, and fighting, and bawling obscenely; some were stretched on the pavement insensibly drunk, while at every few steps the footway was taken up by drunken wretches being dragged to the station-house by the police.—Every decent person was compelled to walk in the road, so that it was physically as well as morally dangerous for decent persons to come into contact with a scene of that description, in the way they must go to approach the Broadway church, and it was impossible to get at that church without passing through a scene of this horrid description.|| These disgusting exhibitions take place every sabbath in Christian Britain.

The streets of our large towns in particular, daily exhibit other gross immoralities, the effects of intemperance, such as riots and disorders, indecent acts and language, and profane imprecations. Let the reader reflect for a few moments on the following picture of the state of morals in London, by the Rev. Dr. Harris, author of "Mammon."—"Twelve thousand children are always training in crime, graduating in vice, to reinforce and perpetuate the great system of iniquity; three thousand persons are receivers of stolen property, speculators and dealers in human depravity; four thousand are annually committed for criminal offences; ten thousand are addicted to gambling; above twenty thousand to beggary. Thirty thousand are living by theft and fraud.

That this dreadful energy of evil may not flag from exhaustion, it is plied and fed with three millions' worth of spirituous liquors annually; twenty-three thousand are annually found helplessly drunk in the streets; above one hundred and fifty thousand are habitual gin drinkers; and about the same number of both sexes have abandoned themselves to systematic debauchery and profligacy."

Not less than thirty thousand individuals, in a state of drunkenness, are taken into custody every year in the metropolis, in addition to eight thousand five hundred and sixty cases, nine-tenths of which originate in or about the doors of public-houses.*

Colonel Charles Rowan, commissioner of the new police, states, that the numbers taken into custody for drunkenness, form but a small portion, not half, not indeed a third, of the whole cases. The police do not interfere with any person who is not disorderly or capable of getting home, even with a little of their assistance. So that if thirty thousand persons were taken into custody for drunkenness, in one year, the presumption would be, that there were sixty thousand cases with which they did not interfere.†

The officers of police state, that more than fifty thousand individuals are seen annually in the streets of Liverpool, in a state of gross intoxication.‡

In Ireland and Scotland we find the same evidence of demoralization, in particular in the large towns. Moderate calculations show, that there are in the United Kingdom, not less than five hundred thousand habitual drunkards, which in fact, comprehends a portion only of the actual number of cases. The consequences as described above, are profaneness, crime, and a state of morals utterly destructive of order, peace, and religion.

5. *Intemperance and prostitution.*—The use of strong drink inflames the passions, obscures the intellect, and sears the conscience. We cannot therefore feel surprised, that under its inflaming influence, reason loses its power, and the admonitions of conscience cease to produce their proper effects. Investigations show that indulgence in strong drink, is the chief source of prostitution. The toast of an aged and influential distiller in England, some years ago, at a public dinner of the trade, was strongly expressed and correct, "*The distillers best friends—the poor whores of London.*"||

"The same truth," says Professor Edgar, "holds good in Ireland. Many of our spirit-shops are of the basest character, night-houses, houses of assignation, *the nurseries of prostitution and crime.*"§

Mr. Poynder observes, that "with regard to the extensive mischief of drinking among females, there is little doubt, that to this

* Parl. Evid., Appendix, p. 423.

† Parl. Evid. p. 147.

‡ Ibid. p. 270. § Ibid. p. 123. || Ibid. p. 277.

* Parl. Evid. p. 116.

† Ibid. p. 26. ‡ Ibid. p. 382.

§ Parl. Rep., Appendix, p. 128. § Ibid.

source must be ascribed most of the evils of prostitution. To the effects of liquor, multitudes of that sex must refer, both their first deviation from virtue and their subsequent continuance in vice. *Most of the unhappy women, who lead a life of continued profligacy, live more or less under the constant influence of spirituous liquors; perhaps it would be impossible for them, without that aid, to continue such a life, or to endure the scenes which they are called to witness.*"*

The Rev. David Ruell, chaplain of the new prison, Clerkenwell, and formerly to the house of correction, Cold Bath Fields, for a period of not less than thirty years, and whose opportunities of investigation must therefore have been extensive, remarks, "Drunkenness is the very element in which thieving and prostitution live; for such is the wretchedness of mind which those vices usually produce, that it becomes the only means of driving away painful reflections."†

Mr. George Wilson, of London, one of the overseers in the parish of St. Margaret's, Westminster, and also one of the governors of the poor, states as follows:—"When unfortunate females have applied for parochial assistance, or being pregnant, have applied for admission into the workhouse, I have invariably, in the presence of the matron, inquired into the causes which led to their wretchedness; and I think I may say almost, if not always, they have attributed it to the excitement of liquor, being taken out by their companions in those hours that were devoted to their relaxation, or their attending a place of worship, and taken to a public-house; there the company and the excitement of spirits have thrown them off their guard, and they have dated their first ruin to that, I think, almost invariably.‡

Again, the same gentleman remarks, "the poor wretched girls who live by prostitution, and who are the best customers to the gin-shops, die off in about four years; four or five generations have passed away during the time I have lived there: those who had become so notorious in the neighbourhood, as to attract especial observation, we have seen quickly become bloated and die; two or three may be found in the workhouse, who, from medical assistance, regular diet, &c., are still living monuments of their depravity, but blotched and diseased.|| These unfortunate creatures were at the commencement of their career, "in robust health, blooming healthy girls, and well-clad."

A melancholy, but instructive case of intemperance and prostitution, came under the cognizance of the magistrate at the police office Hatton Garden, London, May, 1841. A man and his wife were charged with creating a disturbance in the public streets. The female was drunk and beating her

husband, and the policeman was under the necessity of locking them both up, to restore the quiet of the neighbourhood. The man was perfectly sober. On investigation it was found, that the parties had been married thirteen years, during twelve of which no wife could ever prove a greater blessing to her husband—all was harmony and bliss, the male defendant, as the papers state, being a steady man, and able to appreciate and foster the gentleness and fondness of his partner. About a twelvemonth back, however, the sudden change took place, which terminated in her then degraded situation. A gossiping neighbour, on one occasion, tempted her to enter a gin-palace. This was the cause of a second visit, when she became inebriated, and in that state her seduction was effected, since which period, she has wandered about the streets a drunkard and a prostitute. Her husband had done every thing in his power to reclaim her from her abandoned career, but hitherto his efforts had proved ineffectual. She had not only refused all offers of support in an appropriate asylum, but had for many weeks past daily beset him in the streets and at his employers, and nothing but inevitable ruin now stared him in the face.

Such is a brief history of thousands of similar unfortunate cases. Indeed it would be difficult to find many instances of prostitution, in which strong drink had not been employed as an agent to inflame the passions, and to excite the imagination. In most of our large towns, on Sunday evenings in particular, the public-houses are provided with all kinds of sensual attractions, such as painting and music, and are usually literally crammed with young persons of both sexes. The consequences are awful in the extreme. From the official tables of population for 1830, we ascertain that there were born during that year, in England and Wales, not less than eighteen thousand six hundred illegitimate children. It is probable that if all such cases were known, the number in the United Kingdom would not be less than thirty thousand every year. In London alone, we are told that there are at least eighty thousand prostitutes, all of them steeped in degradation of the deepest kind, and most of them continually under the influence of strong drink. These are awful facts, but no less awful than true. Is it not time, therefore, for Christians to bestir themselves, and to banish from their homes and sanction, that cup which produces and perpetuates a system, no less abhorrent in its nature than pernicious in its effects.

Bisset Hawkins, Esq., M.D., F.R.S., in an article entitled "Contributions towards the Moral Statistics of Manchester," acquaints us with the following particulars, illustrative of the subject under consideration. In the year 1833, there existed in the township of Manchester, one hundred and seventy-eight houses of ill-fame, inhabited by seven hun-

* Parl. Evid., Appendix, p. 418.

† Ibid. p. 307. ‡ Ibid. p. 278. || Ibid. p. 275.

dred and eighteen females, who supported themselves, altogether, by prostitution, with the exception of forty of that number, who occasionally applied themselves to business. Out of seventy, who were separately interrogated upon this point, fifty-four admitted that they had worked in factories, and no less than one-half of those questioned, were quite drunk at the time when this investigation took place, viz., at ten o'clock on a Sunday morning, in the month of June. The ages of these unhappy creatures varied considerably; thirteen years was the lowest mentioned, and four-fifths of the whole seven hundred and eighteen were between the ages of thirteen and twenty. The number of *public-houses* where prostitutes were allowed to assemble, was forty-one. No less than fifty-five *retail-brewers* permitted dissolute characters to congregate upon their premises."* The author is convinced that this state of things, bad as it may appear, does not represent the actual condition of the town. From his own investigations, as a medical man, as well as from inquiries from others, he does not hesitate to affirm that three-fourths of the loathsome disease which results from this unhallowed system, is the consequence of criminal indulgence either in an actual state of intoxication, or when the passions are roused by more or less vinous excitement. It is horrible to reflect on the extent of this disgusting disease. It is a subject, however, known only to its guilty victims and to professional men, and one too on which it would be improper to dilate in a work intended for popular circulation.

The vast number of females who frequent the gin-shop, in the present day, renders this lamentable state of things a matter of less surprise. The Rev. David Ruell states that there entered, in one week, into fourteen of the more prominent gin-shops of the metropolis, no less than one hundred and forty-two thousand four hundred and fifty-three men, *one hundred and eight thousand five hundred and ninety-three women*, and eighteen thousand three hundred and ninety-one children; the women and children united nearly equalling the men, and "surpassing them in the grossness and depravity of their demeanour;" making a grand total of no less than two hundred and sixty-nine thousand four hundred and thirty-eight.† Probably, the number of *cases* of females entering gin-shops and public-houses, in the metropolis, for the purpose of obtaining liquor, would, if accurately ascertained, amount not to tens of thousands only, but to hundreds of thousands every year. Colonel Charles Rowan, Commissioner of the New Police, states that of the number of *persons* taken into custody for drunkenness, the proportion is two-thirds of males to females.‡ If we take this as an

average estimate it will be found that ten thousand females are taken to the police offices of the metropolis every year in a state of gross intoxication. According to the Metropolitan Police Report for the year 1833, the number apprehended for drunkenness was, males, eighteen thousand two hundred and sixty-eight, *females*, eleven thousand six hundred and twelve, besides eight thousand five hundred and sixty apprehended for disorderly conduct in the streets, (nine-tenths of which originated in or about the doors of public-houses) of which number there were three thousand three hundred and eighty-two males, and *five thousand one hundred and seventy-eight females*.*

One of the boroughreeves of Manchester, during the period of his office, took the aggregate number of persons who entered a well-accustomed dram-shop in that town in the course of five minutes, for eight Saturday evenings. The result of this personal investigation was, that the aggregate of the eight times (that is to say, in forty minutes) was one hundred and twelve men, and *one hundred and sixty-three women*, being at the rate of four hundred and twelve per hour. The time of calculation was varied from seven to ten o'clock, so that it gave a fair specimen of the general run of business for the evening.† In Edinburgh, in the course of one week, there were brought to the police office, one hundred and ninety-two males and females in a state of riotous intoxication.‡ During another week ninety-one males and *one hundred and thirty females* were brought to the different police watch-houses intoxicated with whiskey.|| In the course of a third week, in the same city, seventy-one men, *one hundred and thirty-three women*, one boy, and one girl, from four to eight years of age were brought to the police watch-houses in a similar disgraceful condition.§ Statistics of female intemperance, in Ireland, also might be adduced at considerable length. It is a lamentable fact that female intemperance is a strong characteristic of the present age. Nor is this intemperance altogether confined to the operative classes, as evidence from those who are well acquainted with the facts testifies. The consequences of this awful extent of intemperance among females, it is almost impossible to depict, whether as it concerns its effects on domestic life, or its results on the physical as well as moral condition of their unfortunate offspring, and consequently its influence on the rising generation.

6. *Intemperance and litigation.* The connexion between intemperance and litigation is no less intimate and powerful than

* Proceedings of the Statistical Society of London, vol. 1. p. 39.

† Parl. Evid. p. 396.

‡ Ibid. p. 25.

* Ibid. p. 116.

† Ibid. p. 52.

‡ Edinburgh Weekly Journal. October 14, 1829.

§ Caledonian Mercury. October 26th, 1829.

|| Ibid. November 5th 1829.

the relation which exists between drunkenness and crime. It is ascertained that a vast proportion of litigation has its origin in acts of folly and disorder committed under the excitement of drink. Recent investigations on this point are strong and conclusive.

A legal gentleman, not a member of the Temperance Society, makes the following statements.—“I am an attorney, and have, of course, much intercourse with the labouring classes of my neighbourhood. I have taken, indiscriminately, one hundred names of persons to whom I have had to apply professionally for payment of debts owing by them. In order that there could be no possible leaning on my side, for the purpose of ‘making out a case,’ I have taken the last hundred in my books, in succession, as they were given to me, and I find the result of an examination into the causes which led to their being ‘put to the attorney,’ to be as follows:—six only because they *would not* pay (of whom three are drunkards)—twenty-two reduced by sickness or want of employment, or who disputed the accounts rendered—thirty-one with whom I am not sufficiently acquainted to know the cause—and the remaining forty-one who to sheer drunkenness alone owe their poverty, and the disgrace of being in an attorney’s hands, whilst receiving wages amply sufficient to keep them in a decent and respectable manner, and ‘owing no man anything.’ Out of the forty-one, too, twenty of the accounts, are actually for *ale-shots*! I know the wives of several of these forty-one individuals, and, with two exceptions, they are careful, managing, good wives, and if the husbands did *their* duty, would soon have comfortable tidy families, and a store in hand.”

“Thus,” remarks this gentleman, “forty-one parts out of one hundred *at least*, of the poverty of the individuals who have come under my observation, are entirely caused by these individuals themselves, and therefore might easily be removed by them.—If from the thirty-one cases with which I am not fully acquainted, were culled, the number whose distresses are to be attributed to intemperance, no doubt the forty-one could be considerably increased. I think it will not be unfair to proportion them as the other sixty-nine proportion themselves. Thus we shall add eighteen to the forty-one, making a total of fifty-nine, considerably more than *one-half*; fifty-nine out of one hundred, whose distress, with that of their wives and families, is entirely to be attributed to their intemperance.”*

The following statement drawn up by Nathan Howard, Esq., of Stephentown, New York, Justice of Peace, contains the number of law suits that came before him during a specified period.

In 1816,	347 suits,	40 of them in January.
„ 1817,	323	„ 49 „ „ „
„ 1818,	252	„ 50 „ „ „

Moral Reformer, vol. iii. p. 352, 1833.

In the above States in three years, as near as Mr. Howard could recollect there were sixty suits of petit larceny, and assault and battery.

In 1831, twenty-five suits. In 1832, fifty-four suits. In 1833, twenty-five suits up to the 1st of November, 1833. “In all the above cases of assault and battery,” adds Mr. Howard, “one or both of the parties, according to the best of my recollection, were more or less intoxicated.”

Upon this subject much light is thrown in one of a series of Essays published some years ago, and addressed to the citizens of Chittenden, County Vermont. The New York Observer states that a member of the bar, whose acquaintance with the law business of the county, had for several years, been extensive, assisted in preparing these Essays and the calculations are therefore probably as accurate as the nature of the case will admit.* The population of the county in 1820, was about sixteen thousand.

The Essay in question states intemperance to be the moving cause of litigation. At the period it was written there were commonly five hundred county court suits commenced in a year in that county, and perhaps five thousand justice suits. “To an individual unacquainted with any thing relative to the cases, but the names of the parties, who were often temperate men, it would seem,” says the writer of the Essay, “extravagant to assert, that four-fifths of these suits were occasioned directly, or indirectly, by intemperance.” But,” he adds, “bold as the assertion may appear, a careful examination has convinced us that it is true.” After entering into some particulars to substantiate this statement, the writer states that in those cases where creditors think it necessary to attach the property of the debtor, the defendants are almost universally men of intemperate habits, and an attachment of the property of a temperate man is almost unknown. The drunkard only is subject to have the property he has acquired, and the means of acquiring more, swept from him by the grasp of the law. The drunkard only is obliged to ransack the county to procure bail, and is at last committed to prison because he can find no person with sufficient confidence to become his surety.

The court and counsel fees, and loss of time on both sides, and the sacrifice on forced sales of property, made the actual average expense of county law suits to be not less than one hundred dollars. The expense of justice suits was not less than five dollars. This made an expenditure of seventy-five thousand dollars per annum, “a very large proportion of which was to be charged to the account of intemperance.” The Essay concludes by stating that if these estimates of the expenses of law suits, and of the proportion of them occasioned by intemperance be correct, it causes an annual expenditure of sixty thousand dollars in law suits. Deduct ten

* New York Observer, June 6th, 1829.

thousand dollars for the gain of the officers of the law, and fifty thousand dollars remain, which forms the amount of loss which that single county annually sustains by what is correctly denominated, *drunken litigation*.

Perhaps it would not be too much to assert that four-fifths of the law cases in this country, as well as in America, have their origin, directly or indirectly, in intemperance. Men, under the influence of strong drink, are rash, self-opinionated, and quarrelsome, conditions of mind certainly productive of those "woes," "sorrows," "contentions," and "babblings," which form so fruitful a source of emolument to the legal profession.

V. *Effects of intemperance on national intellect and education*.—The progress of education has been powerfully impeded by the use of strong drink. This department of our inquiry may be considered either in regard to its influence on the *skill* of a community, or the obstacle which it presents to intellectual and literary labours, and to scientific discovery.

An intimate connexion subsists between the *brain* and the *mind*. A healthy condition, therefore, of this organ is an object of the highest importance. It has been correctly observed that we might as well expect good digestion with a diseased stomach, or good music from a broken instrument, as a good mind with a disordered or enfeebled brain.* "It is a defective brain which makes the idiot, and a diseased brain which causes delirium and insanity; and all the various states of mind produced by alcohol, opium, &c., arise from the disordered action which these articles produce in the brain."†

The mass of those who indulge in strong drink will be found in general to be destitute of a liberal education. Habits of sensuality are necessarily incompatible with high intellectual cultivation. In a previous division of our enquiry it has been shown that the use of intoxicating liquor deprives mankind to a considerable extent, of the *desire* as well as the *power* to acquire knowledge. High authority has described one of the effects of strong drink to be its *extinction of aptitude for learning, and destruction of mental capacity and vigor*.‡

Dr. South, an eminent divine, in his usual quaint and forcible style, correctly remarks that, "in the long run, it is impossible for a man to turn sot, without making himself a blockhead too." "Time and luxury together," he further observes, "will as certainly change the inside, as it does the outside, of the best heads whatsoever; and much more of such heads as are strong for nothing but to bear drink, concerning which it ever was, and is and will be a sure observation, that such as are ablest at the barrel are weakest at the book."

Philip of Macedon, once received a severe, but just reproof, whilst dining with Dionysius, whom he had invited to be his guest at Corinth. The royal father of his guest was fond of literature, and, in his leisure hours, frequently employed his pen in pursuits of that nature. Philip was inclined to treat this practice with derision. "How could the king find leisure," he remarked, "to write these trifles?" "In those hours," replied Dionysius, "which you and I spend in drunkenness and debauchery."*

The biographies of some of the most distinguished literary characters of this and of other countries present lamentable examples of the direful effects of alcoholic liquors on the intellect. The national injury thus sustained may be considered in a two-fold point of view, that is, in the first place, from the partial incapacity for mental labours which is thereby produced; and secondly, the premature mortality of men whose mental exertions might otherwise have greatly benefitted their country. Lord Byron forms a prominent example. Prior, according to his biographer, was not free from the charge of intemperance. Dr. King states, that Pope hastened his end by drinking spirits. Pope remarks, that Parnell "was a great follower of drams, and strangely open and scandalous in his debaucheries." All are agreed that "he became a sot, and finished his existence." Dryden, in his youthful days, was conspicuous for sobriety, "but for the last ten years of his life," observes Dennis, "he was much acquainted with Addison, and drank with him even more than he ever used to do, probably so far as to hasten his end." "Cowley's death," remarks Pope, "was occasioned by a mere accident, whilst his great friend Dean Pratt, was on a visit with him at Chertsey. They had been together to see a neighbour of Cowley's, who (according to the fashion of the times,) made them too welcome. They did not set out on their walk home until it was too late, and had drank so deep, that they lay out in the fields all night. This gave Cowley the fever that carried him off." The immortal Shakspeare also fell a victim to the same direful habit. "Shakspeare, Drayton, and Ben Jonson had a merry meeting, and, it seems, drank too hard, for Shakspeare died of a fever there contracted."†

Burns, it is well known, fell a victim to intemperance. In the commencement of the year 1796, he was afflicted with a severe attack of the rheumatic fever. A few days after his convalescence, Lockhart informs us that "he was so exceedingly imprudent as to join a festive circle at a tavern dinner, where he remained until about three in the morning. The weather was severe, and he,

* Brigham on Mental Cultivation. Sect. 1.

† Ibid.

‡ Parl. Report, 1834, p. 4.

* Plutarch.

† Diary of the Rev. John Ward, M.A., Vicar of Stratford-upon-Avon.

being much intoxicated, took no precaution in thus exposing his debilitated frame to its influence. It has been said that he fell asleep upon the snow on his way home. It is certain that next morning he was sensible of an icy numbness through his joints, that his rheumatism returned with three-fold force upon him, and, from that unhappy hour, his mind brooded anxiously on the fatal issue." The life of this unhappy poet terminated in the following July.

A mere cursory investigation of this subject must convince every reflecting mind, what very great advantage would be derived in an intellectual point of view, from the general adoption of the principle of total abstinence.

The use of stimulating liquors, not only deprives mankind of intellectual advantages in a personal point of view, but it diminishes the inclination for imparting knowledge to others. Hence, the children of the intemperate are in general badly educated. A great amount of educational neglect may be traced to intemperate parents, by which the intellectual progress of the rising generation is considerably impeded; producing a corresponding defect in the aggregate of knowledge and intellectual acumen, with a proportionate approximation to the miseries of barbarism.

The limited patronage extended to literary and scientific institutions in this country, may be adduced as additional evidence in proof of the effects of intoxicating liquors in impeding the progress of education. The sober and industrious mechanic in general devotes a portion of his earnings, not only to his own improvement, but to the intellectual advancement of his children. He is animated with the desire of elevating his family in their condition in life, and his efforts rarely fail of being attended with success; whereas ignorance, barbarism, vice, and brutality are, and ever have been, the uniform concomitants of sensuality and drunkenness. If it is not literally true that "knowledge is power," yet it is indisputable that the powers of nature are either inert or unprofitably exerted, unless their operations be directed by its influence, and it is equally certain, that education is the great source of all useful information; while temperance, industry, and frugality, are the handmaids of education.

The want of education is undoubtedly a fruitful source of intemperance. On the other hand, however, it must be admitted that intemperance is a still more powerful antagonist to education. Ignorance and intemperance are in fact with respect to each other, interchangeable causes. Recent copious statistics tend very much to elucidate this highly important subject of investigation. Dr. Francis Lieber, in a work entitled, "Remarks on the relation between Education and Crime," published at Philadelphia, in the United States, has collected with great care some important statistical evidence.

Among other general conclusions which resulted from his inquiries were these:—"That intemperance, which is very often the *cause* of loose education, is a most appalling source of crime," and "That by preventing intemperance, and by promoting education, we are authorized to believe that a considerable diminution of crime would be effected." To remove intemperance will tend very much to advance knowledge, and consequently to diminish crime. Among other evidence collected by Dr. Lieber, and exhibiting the close connexion between intemperance and ignorance and crime, are the following statistics in relation to the prisons of several States in America.

Return of Mr. Wiltse, agent of Sing-Sing State Prison.

There are at present 842 prisoners.	
170 prisoners cannot read nor write.	
34	have never been at any kind of school.
85	know how to read but not to write.
510	know how to read and write, but a large proportion of them do it very imperfectly.
42	received a good common English education.
8	went through a college.
485	have been habitual drunkards; about one-third of the above number actually committed their respective crimes when intoxicated.

Abstract of a Report from Rev. B. C. Smith, chaplain of Auburn State Prison.

The first statement refers to their circumstances as to education. Number of prisoners, six hundred and seventy.

Of collegiate education	3
Of academical	8
Of common	204
Of very poor	267
Without any	188

The next statement describes their habits in relation to the use of spirituous liquors.

Excessively intemperate	258
Moderately , ,	245
<hr/>	
Intemperate	503
Temperate drinkers	159
Total Abstinents	8
<hr/>	
	670

The statement that follows, relates to the same prisoners, and enumerates various interesting particulars in reference to a number of subjects canvassed in the present and other Sections, such as the influence of intemperance, on crime, sabbath-desecration, religious instruction, domestic happiness, &c., &c

<i>Under the influence of spirituous liquors at the time of committing their crime</i>	402
<i>Had intemperate parents</i>	257
Lost or left parents before 21 years of age	397
" " 17 "	262
" " 14 "	121
" " 10 "	58
Had been in the Sunday school previous to conviction	19
Had been habitual readers of the bible	25
Had committed the decalogue to memory	74
Had been strict observers of the sabbath	11
Unmarried	318
Married	352
Lost wives by death, previous to conviction	31
Left wives previous to conviction	86—117
Living with wives when arrested	235
Living without wives when arrested	435
Children belonging to married convicts	953

Statement of Mr Pilsbury, warden of Connecticut State Prison. Number of convicts in the prison, 180.

The proportion of eight in one hundred convicts, when they came to prison, could read, write, and cipher:
46 in 100 could read and write.
32 „ 100 could read only.
22 „ 100 could neither read nor write.
72 „ 100 never learnt any trade.
24 „ 100 began to learn, or learned, trades which they did not follow.
4 „ 100 have followed regular trades.
44 „ 100 committed their crimes while under excitement, caused by the use of ardent spirits.

No convict was in the prison, who, before his conviction, could read and write, and who was of *temperate habits*, and followed a regular trade.
Of the convicts who could read and write, and were *temperate* 2 in 100
Of those who could read, write, and follow a trade .. 4 „ 100
 " who had never been married 64 „ 100
 " who were married and followed a trade 4 „ 100
 " who were married, followed a trade, and were *temperate* 0 „
 " who acknowledged themselves to have been habitual drunkards... 75 „ 100
 " not natives of Connecticut..... 40 „ 100
 " deprived of their parents before they were ten years old 32 „ 100
 " deprived of their parents before they were fifteen years old 15 „ 100

The following table presents a summary of an ingenious and useful document drawn up by Mr. Joseph Bentley, and the result of several years industrious investigation. It exhibits the number of houses for the sale of intoxicating liquors, institutions and seminaries for the advancement of knowledge, and the consequent comparative state of crime in England and Wales, compared with the population. For example, in the seventh and eighth columns, we find that in England there is only *one* mechanics' institution to 102,812 individuals, while there is one ale-house to every 326 persons, and so on. This table was prepared several years ago, but there is little doubt that it presents a fair average of the state of things in the present day.

DRINK, EDUCATION, AND CRIME.

	Population	Number of Inhabitants to one School.	One endowed School.	One unendowed School.	One Bookseller.	One Public Library.	One Mechanics' Institution.	One Ale-house.	One Person committed for crime annually.	One offender who could neither read nor write.	One who could read or write imperfectly.	One who could read and write well.	One of superior education.
Average for England	.....	1,038	5,051	1,334	4,634	12,167	102,812	326	699	2,125	1,307	10,272	58,341
North Wales	357,900	1,503	6,279	1,979	8,947	44,737	.....	356	1,688	4,366	4,113	71,580	.....
South Wales	445,100	1,429	5,495	1,935	6,545	15,896	222,550	319	1,673	5,298	3,225	20,231	222,550

In Leeds, according to some valuable tables of education, made chiefly under the superintendence of Mr. Councillor Baker, and published by the statistical committee of the town council, there are only six thousand three hundred and ninety-nine children at school in all the day schools. The total number of schools is one hundred and fifty-four. The number of schools where reading and writing are taught is seventy-four. *The number of beer-houses is two hundred and thirty-five.* Out of twenty-two thousand six hundred and seventy-one children of an age to go to school, only six thousand seven hundred and fifty-nine attend any day school, and of these day schools less than one-half teach writing and accounts. The council of the town inform us, that "*several thousands of children are growing up entirely without the benefit of any kind of instruction.*" "If the schools are few and empty," says the authority from whence these facts are quoted, "not so the beer-shops; and it is worthy of remark, that *in the north and east wards, where there are the smallest number of children at school, there are the largest number of beer-houses in proportion to the population.*" In addition to the two hundred and thirty-five beer-houses, there are two hundred and sixteen inns, making four hundred and fifty-one places for the sale of intoxicating liquors, for a population of eighty-two thousand persons, and seventeen thousand eight hundred and thirty-nine houses. There are also fifty-one public, and forty-seven private houses, of ill-fame, besides two public gaming-houses.* These facts are but illustrative of the general state of things in all our large towns. The duty on spirits, the consumption of which, as we have already shown, is the most serious hindrance to education, is increasing, yet not more than a month from the time this was written, the grant for educational purposes, was reduced from £30,000 to £15,000, or exactly one half.

These interesting statistics demonstrate the important truth, that ignorance is the offspring of intemperance. The educational efforts of the present day cannot but be limited in success, so long as the love of strong drink prevails to the present fearful extent. The removal of intemperance must precede the universal extension of education. Gin-shops and mechanics' institutions are antagonistic powers. The amount of sensuality and ignorance, poured forth in all directions by the one, far exceeds in its influence on the mass, the light and information diffused by the other; and the various literary and scientific institutions, academies for the advancement of knowledge, whether collegiate or private, Sunday schools of all denominations for the instruction of youth, all of these combined, present a meagre and lamentable display, compared with the vast

number of houses licensed for the sale of intoxicating liquors. An occasional grant of £30,000 for educational purposes is of little avail, when one hundred thousand establishments continually deal forth a poison which destroys reason, blunts the intellect, and indisposes the mind to intellectual improvement. The temptations to indulge in the pleasures of sense, far exceed the inducements held forth for intellectual cultivation. It is essential therefore, that a radical change should be effected in the drinking habits of the people, or the advocates of education may in vain anticipate a successful termination of their zealous and laborious efforts.

VI. *Effects of intemperance on freedom, patriotism, national enterprise, and the transaction of public business.*—The history of strong drink is inseparably connected with the decay of national freedom and patriotism. The ancient Greeks and Romans, until vitiated by luxurious habits, esteemed these virtues as the foundation of the common weal, and early instilled them into the minds of their youth. The athletic exercises, to which their young men were habituated, had a tendency, not only to inure the body to the vicissitudes of active life, but to expand and strengthen the moral capabilities; while the rigid abstinence from all intoxicating liquors, which the laws of their games enjoined on the candidates for victory, accustomed them to habits of temperance on other occasions. Dr. Gillies, speaking of the gymnastic exercises of the Greeks remarks, that the firm organization acquired by perpetual exercise, counteracted that fatal propensity to vicious indulgence, too natural to their voluptuous climate, and produced those inimitable models of strength and beauty, so deservedly admired in the remains of the Grecian statuary. There is, he further observes, *a courage depending on nerves and blood, which was improved to the highest pitch among the Greeks.**

The development of the physical powers, formed an essential part of the education of their youth; and history informs us, that when these ennobling exercises were abandoned for effeminate and enervating pursuits, the virtue and independence of the ancient republics sank into gradual decay.

The influence of intoxicating liquors in depressing the physical powers, has been remarked both by ancient and modern writers. The Germans, once so celebrated for their warlike deeds, form a remarkable example. "Indulge their love of liquor," observes Tacitus, "to the excess which they require, and you need not employ the terror of your arms; their own will subdue them."†

A modern writer, makes a similar observation in regard to the inhabitants of Ireland. "Were the Irish," he remarks, "allowed to indulge their taste for inebriety, their own

* Facts and Figures, p.p., 15, 16.

* Gillies' History of Greece, ch. vi.

† Tacitus, De Morib. Germ.

vices would more effectually subdue them than centuries of war."*

The fierce and unruly passions created by the free use of strong drink would soon rend the bonds of society, were not powerful counteracting causes in operation. Burke beautifully observes, that society cannot exist, unless a controlling power upon will and appetite be placed somewhere; and that the less there is within, the more there must be without. *It is ordained in the eternal constitution of things*, remarks that beautiful writer, *that men of intemperate minds cannot be free—their passions forge their fetters*.

Most writers concur in opinion, that the free use of strong drink is incompatible with national freedom; indeed it cannot easily be imagined how a nation can enjoy genuine liberty while submitting to the sway of so enslaving a custom. A people, remarks Dr. Rush, corrupted by strong drink, cannot long be a *free* people. The rulers of such a community would soon partake of the vices of that mass from which they were secreted, and all their laws and governments would sooner or later bear the same marks of the effects of spirituous liquors which are observed to be common to individuals.†

The history of Greece and Rome presents numerous remarkable examples of the effects of luxury on national prosperity, and the consequent decline of national virtue and patriotism. These nations were at the highest period of their prosperity when those laws, which had especial reference to temperance, were most strictly observed. Luxurious customs, however, were gradually introduced, and in the first instance, unfortunately patronised by individuals possessing considerable influence in society; who either did not foresee, or who disregarded, the fatal effects which would inevitably result from their imprudence. The few wise and upright characters who strenuously opposed the introduction of them, as calculated to lead to a general corruption of morals, and consequently to national ruin, were treated with contempt, and regarded as ascetics. The laws, which had contributed so greatly to their national prosperity, became less regarded and less rigorously enforced. This circumstance indeed will excite little surprise, when it is known that the magistrates themselves infringed upon the very laws they were appointed to execute. Athenæus relates that one Demetrius being censured by the Areopagites as a loose liver, plainly told those magistrates, that if they desired to make a reformation in the city, they must begin at home; for that even amongst them there were *persons as bad livers as himself, and even worse*.‡

The dissipation into which the people of these mighty nations fell, engendered feelings of a selfish nature. The love of luxury soon aborbed those ennobling virtues for which the Greeks and Romans had been previously distinguished, and freedom and patriotism were sacrificed at the shrine of personal gratification. The lives of Nero, Caligula, Domitian, and other Roman emperors, as well as of some monarchs of the Greek empire, are illustrations in point.

Sammonicus Severus relates a melancholy example of this national degeneration. "The Roman youths," he observes, "would commit the most dreadful crimes in order to have their palates gratified; and most of the people would come drunk to the public assemblies, where they had to advise on matters of great consequence to the state."*

Diodorus, the Sicilian, remarks of the Tyrrhenians (the ancient inhabitants of Tuscany) "that they were once a valiant people; famed for arms, and for their naval power; but in his time much degenerated; and that having thrown off their former sobriety, and betaken themselves to an idle, debauched life, in riot and drunkenness, it was no wonder they had lost the honour and reputation their forefathers gained by warlike achievements."†

A modern writer, of considerable learning and research in reference to this subject, observes, that the vice of intemperance debases the genius and spirit of a nation; indisposes them to noble designs and generous actions; and either softens them to an effeminate indolence for the public welfare, or fires them to seditious tumults.‡

The elections to British Parliament exhibit one of the most degrading features of modern history. Individuals of great intellectual acquirements, and high respectability in life, *candidates for the honourable office of senators*, have been known openly and unblushingly to tamper with the freedom of electors, by inducing them to indulge in sensual temptations, and it is a fact of unquestionable notoriety that many of our modern legislators have obtained their seats in the legislature by means of the drunkenness of their constituents. At these times, some of the most populous and influential towns in the United Kingdom, exhibit a large proportion of their inhabitants, more or less under the influence of intoxicating liquors; and not unfrequently riots, destruction of property, and loss of lives, are the unhappy results. These practices, unfortunately for society, are but too general in their occurrence, and are equally subversive of individual independence and national prosperity.

* State of Ireland, Past and Present, by J. W. Croker, 1808, p. 31.

† Dr. Rush's Inquiry into the Effects of Ardent Spirits.

‡ Athenæus, Δειπνosoph.

* Siquidem eo res redierat, ut gula illecti plerique ingenui Pueri, Pudicitiam et Libertatem suam venditarent: plerique ex plebe Romano vino madidi in Comitium venirent et ebrii de Reipublicæ salute consulerent.

† Diod. Siculus, b. 5.

‡ Disney's Ancient Laws against Immorality, p. 258.

The public papers, not many years ago, stated, that at one election, in a small village in England, there were consumed 7,200 gallons of ale and porter, 740 gallons of spirits, and 1,470 bottles of wine. This, unfortunately, is no solitary instance.

"Nothing was more common a few years ago," says a distinguished American, "in our part of the country, than for candidates for public offices to furnish electors with spirit. They did it to obtain their votes, and elections were scenes of dissipation, outrage, and riot."*

The known intemperate habits of many of the British legislators of the present day, is a circumstance calculated to excite feelings of regret and dismay. How can the interests of a nation be expected to prosper, when some of the publicly appointed guardians of her welfare not only countenance and encourage the sources of national decay, but are *known to enter the solemn and deliberate assembly of the nation, in a state of intoxication*. In 1834 a petition was presented to the House of Commons, complaining of the prevalency of crime and drunkenness. In the course of a debate which ensued, an *honourable* legislator made the following remarks:—"There were persons who looked with jealousy on every *enjoyment* of the poor. If a poor man did get tipsy, what great harm was there in it? Gentlemen did so ("No," was the reply.) He had seen members of that house in that state; aye, and within the house too."

Mr. O'Connell, some few years ago, during a discussion in the House of Commons, on the admission of ladies into the galleries of that House, said, that in former days, hospitality of a particular kind was exercised to such an extent, that the members of the Irish House of Commons, *used to come drunk to the House*. A resolution was passed to admit ladies into the gallery, and from that moment not a single drunken man ever presumed to make his appearance.

The deplorable examples of the Greek and Roman empires may surely be recurred to as subjects of serious warning and alarm.

The love of strong drink penetrated even the legislative assembly of Barbadoes, West Indies. Pinckard relates, that during his visit to that island, punch was drunk in the senate-house. On one occasion, when that traveller was present, two persons suddenly appeared with a large bowl, and a two-quart glass filled with punch and sangaree. These were in the first place, presented to the speaker, who after dipping deep into the bowl, passed it forward among the members of the house. Strangers were also permitted to participate in this senatorial

relaxation.* It need not excite surprise if the measures of this assembly were not characterized by wisdom.

The use of intoxicating liquors has often been productive of injurious results, in regard to national relations; indeed this fact was so well understood, during the drinking days of the Romans and Greeks, that those individuals who could bear much drinking, and at the same time transact matters of state, were held up as examples worthy of imitation. Few persons, however, possess this unevitable distinction. Strong drink is well known to be in the highest degree injurious to the free exercise of reason and judgment; and many are led by its influence undesignedly to betray the interests of their country. Bonosus, according to his historian, Vopiscus, became so habituated to vinous indulgence, that he could at any period indulge to great excess without fear of losing his usual diplomatic caution and self-command.† It was the common practice of this monarch, to make those ambassadors drunk who were deputed by foreign nations to attend his court. By this means he readily discovered the instructions confided to them, of which he afterwards availed himself in state negotiations. Such were the bibulous powers of Bonosus, that it was said of him, that he was born not to live but to drink.

Aurelius Victor informs us, that Galerius Maximus frequently had occasion when sober, to repent of orders given during a fit of intemperance, on which account, he gave strict commands, that in future, no mandates of importance issued in such a state, should be executed. It has already been seen, that the Persians reconsidered on the following day those matters on which they had deliberated during moments of vinous excitement.

Addison, in more instances than one, adverts to the fact, that individuals when under the influence of strong drink, commit acts of which afterwards they have no recollection, and which in a state of sobriety would not have taken place. He remarks, that the person you converse with, after he has drank too much, *is not the same man who first sat down with you*. Upon the strength of this maxim is founded a saying, ascribed to Biblius Syrus, "He who jests with a man that is drunk injures the absent."

The influence of strong drink on public business was a subject which excited grief and comment in Mr. Jefferson, the late distinguished president of the United States. Not long before his death he made use of these remarkable words:—"The habit of using ardent spirit, by men in public service, has occasioned more injury to the public service, and more trouble to me, than any other circumstance which has occurred in

* Amer. Temp. Soc., Sixth Report, 1833.

* Pinckard's Notes on the West Indies vol i. p. 409. † Flav. Vopis. in vita Bonos.

the internal concerns of the country, during my administration. And were I to commence my administration again, with the knowledge which from experience I have acquired, the first question I would ask with regard to every candidate to public office, should be, *is he addicted to the use of ardent spirit?*" In this country, of course, the question would have been, is he addicted to the use of intoxicating liquors.

It requires little effort to show that the use of strong drink is inimical to the political relations of any country. There is no doubt that national interests have suffered much from this cause; and, in all probability, empires, previously in a state of comparative peace and prosperity, have, from the same pernicious influence, been thrown into war and confusion. These consequences did not escape the acute mind of the late Dr. Trotter. The following observations were written, when considering the effects of improper diet on the *nervous temperament*, and the influence it had on national prosperity:—"It must be unfortunate," he remarks, "for any nation to be governed by a man of capricious temper, even though his passions are gentle and mild. A nervous statesman could not easily divest his public measures of some portion of his constitutional dispositions. He would, at times, view things through a false medium; and, by judging from mistaken premises, would conduct the business of government with imbecility and supineness, and thus bring it into contempt. Every plan he devised would partake of the mood he happened to be in at the moment; it would be liable to defeat, and exposed to opposition; in hazard of being divulged before execution, and open to derision. The morbid sensibility of a deluded hypochondriac might alarm a people by imaginary dangers, and in the season of disaster might bring ruin on affairs by irresolution and despondency. By such men nations have been plunged into unnecessary wars, and inglorious peace concluded, when advantageous terms might have been obtained. Men, endued with an exquisitely nervous temperament, ought to be banished from the councils of all sovereigns, however respectable their talents; for consistency and fortitude are incompatible with their physical character."*

Sir W. Temple laments the national consequences of those diseases which arise from intemperance, and which influence the actions of persons engaged in public affairs, and great employments, upon whose thoughts and ears, he remarks (if not their motions and their pains) the common good and service of their country so much depend. Vigor of the mind, he further observes, decays with that of the body, and not only humour and invention, but even judgment and resolution, change and languish, with ill constitution of body and of health; and

by this means, public business comes to suffer by private infirmities, and kingdoms or states fall into weaknesses and distempers or decays of those persons that manage them. This distinguished writer then proceeds to remark that "if intemperance be allowed to be the common mother of the gout, or dropsy, and of scurvy, and most other lingering diseases, which are those that infect the state," then "temperance deserves the first rank among public virtues, as well as those of private men," and he "doubts whether any can pretend to the constant steady exercise of prudence, justice, or fortitude without it."*

The result of war and the fate of nations has been determined by drunkenness in more than one instance in modern times, as the page of history sufficiently testifies.

It is painful to mention," says Mr. Pinkerton, "that even our campaigns are defeated with the low vice of intoxication, which, in a French general or officer, would meet with the sharpest reproach and execration, and would be infallibly followed by the loss of his rank or employment. A venerable French marquis, formerly general of the Mousquetaires, and commanding a body of emigrants, during our last war in Flanders, said to Mr. Pinkerton, in confidence, "Nothing was wanted but prudence and secrecy. We were defeated by punch. I cannot recover my astonishment when I think that the most sensible nation in Europe should be slaves of such a habit. An invasion at ten o'clock at night would find you all intoxicated." Mr. Pinkerton adds, that this satirical effusion may be pardoned to the worthy general's keen feelings of disappointment. "Certain it is," he remarks, "that the Russians were twice defeated in Switzerland, by the mere drunkenness, and consequent want of secrecy, in the leaders."†

Napier, in his *Military Life*, narrates the following instructive example, "The whole French army was drunk the night after the battle of Wagram. It lay in vineyards; and in Austria the cellars are situated in the grounds upon which the wine is grown. The vintage was good, the quantity abundant—the soldiers drank immoderately; and the Austrians, had they but known that we were overcome with liquor and sleep, and made a sudden attack upon us in the night, might have put us to the rout. It would have been impossible to make one-tenth of the soldiers betake themselves to arms. On what threads hang the destinies of empires! All might that day have been changed—the fifth act of the great drama, which had been so long performing in Europe, might have had a wine-cellar for a *denouement*."

Statistical evidence shows, that a great

* Trotter on Nervous Temperament, p. 162.

* Essay on the Gout, Miscellaneous. Part i.

† Pinkerton's Recollections of Paris, Vol. ii. pp. 200.

proportion of the crime, disorder, and immorality which exists in the army and navy department, both in this country and in America, arises from the use of inebriating liquors.

The Duke of Wellington, during an examination before the Commissioners appointed to enquire into the subject of military punishments, in reply to the question of Lord Wharncliffe, "Is drunkenness, in your opinion, the great parent of all crime in the British army?" said "*Invariably.*"

An officer, of nine years experience, states, that he can "call to mind many instances of the grossest insubordination and minor acts of disobedience, committed by men when under the influence of intoxicating liquors, who, in their sober moments, were remarkable for strict compliance with the rules and orders of the service, and whose whole line of conduct, taking it generally, has been so unexceptionable, as to make one curse the means that have produced their crime, disgrace, and punishment."* This officer represents intemperance as the great cause of want of punctuality among soldiers. The soldier is enticed in his leisure hours into the tap-room, "drinking becomes a matter of course, and, seduced by the drowsiness which follows the potations, or rendered forgetful of the passing moments, he loiters at the pot-house, until a friend or some sudden recollections awaken him to the true state of things; off he then goes to the stables, finds them already begun, perhaps ten, twenty, or thirty minutes; is questioned as to the cause of his absence; half-drunken, he gives a saucy reply, staggers to his horse, and the next moment is marched off to the guard-room, under the treble charge of being late, insolent, and drunk."

Again the same officer remarks, "I might enumerate many cases of riot and disturbance in barracks and in the streets, horses injured, accoutrements destroyed, bruises and more serious accidents received, one and all arising from intoxication, and which would never have occurred had the authors of them been sober." "I do not hesitate to say that drunkenness is the bane of the British army; nine offences out of ten are cases of drunkenness, ninety-nine out of a hundred are connected with it. All the trouble, all the anxiety which an officer experiences in command of troops, arises, I may say, from this vice; for the soldier, when sober, rarely acts contrary to his known duties, and it is only when deprived of the balance of his mind by intoxication, that he becomes riotous, disorderly, and troublesome."†

Colonel Stanhope informs us that in British India there are more enormities committed by the soldiers, than in any other part of the world.‡ "Since," said a learned judge on the bench, "the institution of the

Recorder's and Supreme Courts at Madras, no less than thirty-four British soldiers have forfeited their lives for murders, and most of them were committed in their intoxicated moments,"*

Captain H. Davies states that the soldiers in the East Indies, have had their minds so excited on a march by drink, as to have been known, for mere amusement, to fire at a black man going up a cocoa nut tree."†

The same officer makes the following statement: "I cannot recollect a single instance of a man (having been twenty years in the service) having been brought before me in the interior management of my company, or before a court-martial, whose crime did not originate in drunkenness; or if the crime was theft, that drunkenness was not the cause, directly or indirectly, of its commission; drunkenness was the cause of every crime I can recollect. I never knew the case of a man brought before a court-martial, except for some crime connected with drunkenness, unless it was that of a non-commissioned officer behaving disrespectfully occasionally. I do not recollect three instances in all my professional career, where the crime did not originate in drunkenness, or where the crime of theft was not committed for the sake of obtaining the gratification of drunkenness, or when under its influence."

I can conceive there would be no punishment, scarcely, necessary were it not for drunkenness; ninety-nine out of one hundred punishments in the army take place in consequence of drunkenness."‡

Colonel Stanhope expresses his opinion that nine-tenths of the crimes committed in the army for which soldiers are flogged, originate in drunkenness.||

Dr. Cheyne made the following statement October 18th, 1833. "I examined returns from upwards of fifty regiments, to queries which I drew up relative to the influence of ardent spirits in relaxing discipline and leading to punishment; and it appears that nearly all the crimes in the army are owing to the use of spirits, and that flogging might be dispensed with, could any method be discovered of preventing the soldier from drinking ardent spirits."§

Such was the drunken state of the British army at Halifax, Nova-Scotia, that according to the testimony of Captain T. H. Davies, if any sudden emergency were to arise, to require the presence of an army, to quell a mutiny, or to suppress a riot when drunkenness is prevalent—more than half the soldiers would be incapable of duty.¶

The select committee on drunkenness, in their report of 1834, in reference to the "comparative inefficiency of the navy and army," state the following as the result of an examination of eminent naval and military

* Parl. Evid. p. 183.

Ibid. p. 184. † Ibid. p. 193.

* Parl. Evid. p. 190.

† Ibid. p. 180. ‡ Ibid. p. 178. || Ibid. p. 194.

§ Ibid. p. 410. ¶ Ibid. p. 182.

officers:—"Intemperance is a canker-worm that eats away its strength and its discipline to the very core; it being proved, beyond all question, that one-sixth of the effective strength of the navy, and a much greater proportion of the army, is as much destroyed as if the men were slain in battle, by that most powerful ally of death, intoxicating drinks; and that the greater number of accidents occurring in both branches of the service, seven-eighths of the sickness, invalidings, and discharges for incapacity, and nine-tenths of all the acts of insubordination, and the fearful punishments and executions to which these give rise, are to be ascribed to drunkenness alone."*

In the Report of the select committee of the House of Commons on shipwrecks, 1836, we are told that "almost all the cases of insubordination, insolence, disobedience of orders, and refusal to do duty, as well as the confinements enforced as correctives, both of which must for the time greatly lessen the efficiency of the crews, are clearly traceable to the intoxicating influence of the spirits used by the officers and men."†

Captain E. P. Brenton assures us that there is "great loss of strength, vigor, and energy in the crews of British ships from intemperance," and again, says this officer of forty-six years active experience, "If we are ever to have a good set of men in the navy, and men that know and will do their duty, and can protect the navy and merchant service, they must be regularly trained without the use of spirituous liquors."‡

The secretary of war in the United States, affirms that of more than one thousand desertions from the army, during the year preceeding the period he made this statement, nearly all were occasioned by drinking.||

From January 1st, 1823, to December 31st, 1829, the number of desertions in America was five thousand six hundred and sixty-nine. This was an average of more than eight hundred every year, or nearly one-seventh part of the whole army which consisted of about six thousand. The following table exhibits the loss to the country by these desertions, during that period, exclusive of the expences of convening court martials, and other important items.

Year.	Numbers.	Cost Dollars.	Tried by Courts-Martial.
1823	668	58,677	1093
1824	811	70,398	1175
1825	803	67,488	1208
1826	636	54,393	1115
1827	848	61,344	991
1828	820	62,137	1476
1829	1083	96,826	
Total	5,669	471,263	7,058§

* Report of Select Committee. p. 5.

† Select Committee on Shipwrecks. August 15th, 1836.

‡ Parl. Evid. pp. 328-332.

§ Amer. Temp. Soc., 4th Report 1831, p. 32.

|| Ibid., Appendix, p. 71.

The expense was about seventy dollars to each man

A distinguished officer of the army in the United States says, "nearly all the trouble we have with the men arises from drinking," and again, "Probably more than five-sixths of all military offences tried before our courts-martial result from intemperance." One communication from a military post states, "about one-fourth, on an average, were unable to do duty on account of drunkenness, which caused sickness, punishments, and desertions not a few." Lieutenant Gallagher, described by Major General Gaines, as one of the most excellent and exemplary officers of the army, remarks, "I have served extensively as the recorder of Regimental Courts-martial, and do not hesitate to say that five out of six cases of the crimes which are proved before these courts have resulted from intemperance."*

The secretary of the navy declares the use of spirituous liquors to be one of the greatest curses to that department, and a distinguished officer gives it as his opinion that nine-tenths of all the difficulties which the officers have with the men arise from this cause.†

Captain T. H. Davies states, that the East India Company's army, composed of Hindoos and Mahometans, whose only beverage is water, in point of discipline is "very superior to that of the British army."‡

A recent writer relates a remarkable instance of discipline in the British troops, during the capture of Ghuznee, which he attributes to their abstinence from intoxicating liquors. It forms a striking contrast to the examples previously adduced: "Let it be recorded, to the honour of the captors, that though Ghuznee was carried by storm, after a resistance stout enough to have roused the angry passions of the assailants, the Affghans were everywhere spared when they ceased to fight; and it is itself a moral triumph, exceeding in value and duration the praise of the martial achievement of the troops, that, in a fortress captured by assault, not the slightest insult was offered to one of the females found in the zunanu within the walls of the citadel. This forbearance, and these substantive proofs of excellent discipline reflect more credit on officers and men than the indisputable skill and valour displayed in the operation. But let me not be accused of foisting in unfairly a favourite topic, or attempting to detract from the merit of the troops, when I remark in how great a degree the self denial, mercy, and generosity of the hour may be attributed to the fact of the European soldiers having received no spirit ration since the 8th of July, (the place was captured on the 23rd) and having found no intoxicating liquor amongst the plunder of Ghuznee. No candid man, of any military experience, will deny that the character of

* Amer. Temp. Soc., 4th Report 1831 p. 72.

† Ibid.

‡ Parl. Evid. p. 180.

the scene in the fortress and citadel would have been far different, if individual soldiers had entered the town primed with arrack, or if spirituous liquors had been discovered in the Affghan depots. Since, then, it has been proved that troops can make forced marches of forty miles, and storm a fortress in seventy-five minutes, without the aid of rum, behaving after success, with a forbearance and humanity unparalleled in history, let it not henceforth be argued that distilled spirits are an indispensable portion of a soldier's ration."*

VII. *Effects of intemperance on national health and longevity.*—1. *Effects of strong drink on health in former times.*—Physical development is as necessary to national welfare and enterprise, as mental vigor and cultivation are essential to intellectual superiority. Indeed it is now universally acknowledged that physical development has considerable influence on the cultivation of the mental powers.

National industry and commercial activity cannot exist independently of health and slavery. Idleness and poverty, are the unavoidable concomitants of physical enervation. "No truth, in *political economy*," observes Dr. Trotter, "is better proved, than that a nation of sedentary people, can never be a nation of heroes."†

A survey of the state of health in the various nations of the globe in the present day, and a comparison of the result, with that of a similar investigation into ancient states, will lead to the inevitable conclusion that certain causes, either of a new description, or of a more potent influence, must now be in operation.

The habits of the ancients were simple, and their diseases few, so long as the severity of their primitive regulations were rigorously enforced. In course of time, however, luxurious customs were introduced, and diseases multiplied. Seneca pointedly alludes to the influence of wine on the physical appearance of the Roman females, who, in the earlier period of the Commonwealth, were forbidden, under serious penalties, to use any kind of *fermented* wine. This salutary interdiction became less and less observed, until Seneca complains, that in his time the prohibition was almost universally violated. *The weak and delicate complexion of the women, he remarks, is not changed*, but their manners are changed, and no longer the same; they value themselves upon carrying excess of wine to as great a height as the most robust men; like them they pass whole nights at table, and with a full glass of unmixed wine in their hands, glory in vieing with them, and if they can, in overcoming them.

Seneca immediately afterwards adds:—

Dii illas Deæque male perdant.‡

* Havelock's Narrative of the War in Affghanistan.

† Trotter on Nervous Temperament, p. 150.

‡ Seneca, Ep. 95.

Pliny well describes the physical effects of intemperance, as manifested in a pallid countenance, sunken cheeks, ulcerated eyes, trembling hands, restless nights and disturbed dreams.

*Pallor, et genæ pendulæ, oculorum ulcera,
Tremulæ manus, furiales somni,
Inquietæ nocturnæ.*

The statistics on health in the early part of British history are exceeding limited and meagre. It is reasonable however, to infer, that intemperance could not exist to so great an extent among our ancestors, without something like proportionate physical injury. Numerous historical facts also lead us to this conclusion. In the reign of Henry VIII. for instance, the plague raged to a great extent, and appeared to depend not a little on the filthy and intemperate habits of the people. Erasmus attributes it to the "nastiness" of the streets and houses of London. In speaking of the English, he says, "Their floors are commonly of clay, strewed with rushes, under which lie unmolested, a collection of beer, grease, fragments, bones, spittle, excrements of dogs and cats, and everything that is nauseous." Erasmus omits to mention the prevailing intemperance of those times, a vice which contributes, not only to physical debility, (a state peculiarly favourable to contagious disorders,) but to the neglect of industrious habits and cleanliness, and to the consequent production of poverty and filth.

Howel, in a notice which he makes of Sir Henry Blount's "*Organon Salutis*," 1659, observes, in relation to the introduction of one of our national beverages, "Coffee drink hath caused a great sobriety among all nations; formerly apprentices, clerks, &c., used to take their morning draughts in ale, beer, or wine, which often made them unfit for business. Now they play the good fellows in this wakeful and civil drink. Sir James Muddiford, who introduced the practice hereof first in London, deserves much respect of the whole nation." In this passage there is a distinct and unequivocal acknowledgment of the injurious effects which ensue from a practice so common to our ancestors, and the benefits which were found to result from the substitution of a more innocent beverage.

The athletic habits of our ancestors, operated no doubt as a sanatory means of modifying the injurious effects arising from the free use of intoxicating liquors. This observation naturally leads to the inquiry—how it is that strong drink does not so powerfully injure the constitutions of those who reside in the country, and in particular, that class of persons who belong to the labouring part of the community? Dr. Macnish affirms, that "Sailors and soldiers, who are hard wrought, consume enormous quantities of drink without injury. Porters

and all sorts of labourers," he further remarks, "do the same."*

The observation of this writer, however, is in a great measure incorrect. The class of men to whom he alludes, in general possess a naturally strong constitution, and have the advantage also over the inhabitants of towns, not only of healthy exercise, but of pure and invigorating air. The diet of the peasant, moreover, is simple, and free from those noxious ingredients so commonly made use of in luxurious life. His customary drink is taken in moderate quantities, and the laborious exercise he undergoes enables nature to resist its injurious influence. When these persons indulge freely in the use of intoxicating liquor, they do so occasionally only, and invariably suffer the penalties of improper indulgence. Nature, however, not having been habitually abused, puts into action her restorative powers, and by the aid of abstinence, exercise, and good air, soon restores the system, either partially, or altogether, to its usual tone. This, however, is far from being universally the case. The class of persons whose habits we have just referred to, rarely live to a protracted age, subject, as they usually are, to attacks of acute disease, consequent on irregular habits.

The diet of the inhabitants of our large towns, has a tendency to produce intemperance. Pure air, and out-door exercise, those natural stimulants which are essential to health, are either neglected, or beyond the reach of the many, from the nature of their employments; hence the origin of the vast number of chronic diseases which in the present day afflict the human race. The modern man of the town, indeed, is in many respects unlike the being nature evidently intended him to be, and may more correctly be termed the work of human, and not of divine creation.

Some of these causes of ill-health, peculiar to our large towns, are at the same time productive sources of intemperance. Mr. G. A. Walker, surgeon, London, states, that in low districts in towns, "one vastly exciting cause why many persons take stimuli, is the condition of the air they breathe. The infected atmosphere has a depressing effect upon the people subjected to its influence."† And again, "the putrefaction, arising from want of sewerage, generates a desire to drink, from the low feeling it creates."‡ The systems of individuals breathing an impure atmosphere, and perhaps ill supplied with proper food, are ill calculated to resist the deleterious effects of spirituous liquors. Hence the formidable extent of mortality which results from the practice.

2. State of health of nations where

intoxicating liquors are not used.—The diet and health of certain nations, who, not long ago, were unacquainted with the modern inventions of luxury, form a striking contrast with the habits and diseases of more civilized countries. The primitive condition of the inhabitants of New Zealand is thus described by Hawkesworth:—"Water is their universal and only liquor, as far as we could discover, and if they have really no means of intoxication, they are, in this particular, happy beyond any other people that we have yet seen or heard of. As there is perhaps no source of disease either critical or chronic, but intemperance and inactivity, it cannot be thought strange that these people enjoy perfect and uninterrupted health; in all our visits to their towns, where young and old, men and women, crowded about us, prompted by the same curiosity that carried us to look at them, we never saw a single person who appeared to have any bodily complaint; nor, among the numbers that we have seen naked, did we once perceive the slightest eruption upon the skin, or any marks that an eruption had left behind. Another proof of health which we have mentioned on a former occasion, is the facility with which the wounds healed that had left scars behind them, and that we saw in a recent state; when we saw the man who had been shot with the musket ball through the fleshy part of his arm, his wound seemed to be so well digested, and in so fair a way of being perfectly healed, that if I had not known no application had been made to it, I should certainly have inquired with a very interested curiosity, after the vulnerary herbs and surgical art of the country. A farther proof that human nature is here untainted with disease, is the great number of old men that we saw, many of whom, by the loss of their hair and teeth, appeared to be very ancient, yet none of them were decrepit; and though not equal to the young in muscular strength, were not a whit behind them in cheerfulness and vivacity."*

The narrative of the first missionary voyage to the South Sea Islands, informs us, that "until the Europeans visited the Otaheitans, they had few disorders among them. Their temperate and regular mode of life, the great use of vegetables, little animal food, and absence of all noxious distilled spirits and wines, preserved them in health."

The inhabitants of New Zealand are not the only instances of this condition. The Chinese, and natives of Hindostan, are known to be more temperate in their habits, and less subject to disease, than most other nations. Sir George Staunton remarks that "the Chinese recover from all kinds of accidents more rapidly, and with fewer symptoms of any kind of danger, than most

* Macnish's Anatomy of Drunkenness, p. 47.

† Select Committee on Health of Towns, 1810.

‡ 185.

§ Ibid. p. 212

* Hawkesworth's Voyages, &c.

people in Europe. The constant and quick recovery from considerable and alarming wounds, has been observed likewise to take place among the natives of Hindostan. The European surgeons have been surprised at the easy cure of Sepoys in the English service, from accidents accounted extremely formidable.* The same act was observed in regard to the wounded, after the late victory in India. "The medical officers of this army," says a writer cognizant of the fact, "have distinctly attributed to their previous abstinence from strong drink, the rapid recovery of the wounded at Ghuznee."*

Diseases common to European countries are entirely unknown among more temperate nations. The gout and stone form interesting examples. These disorders have hitherto been found to exist only in those countries where intoxicating liquors are freely used. Dr. Ure, in alluding to the commonness of calculous disorders in this country, remarks, that the cause must be looked for in the use of something from which irrational animals abstain, and then states, that it is found in "fermented liquors, and apparently in nothing else."† It is unnecessary, however, to look to the brute creation, when sufficiently strong examples are to be found among the human race. Linnæus remarks of the Laplanders, that they have few diseases, and that gout and stone are unknown among them; which he attributes to their water, which is particularly pure, and their constant drink; and to their abstinence from all fermented liquors, especially spirits.‡ Rumazini affirms, that the Persians who abstain from wine, are free from gout and stone. He also makes allusion to a similar fact in relation to the inhabitants of the Banks of the Rhine, who, although residing in a wine country, do not indulge freely in that injurious liquor.

Tavernier makes the following statement. "As for the gout or gravel, the Persians know not what it means, but the Armenians are troubled with the latter, especially those that in their youth accustomed themselves to more wine than water."|| The same writer, in reference to the inhabitants of Delhi, the capital of Hindostan, speaking of the good effects of water, and lemonade; makes the following remarks:—"A man hath no great inclination, in such hot countries as these to drink wine. Abstinence from wine in these parts, joined to the general sobriety of the natives, is (in my opinion) the cause that they almost know not what is the gout, the stone, disease of the kidney, rheumatisms, quartans; and that those bringing any of these sicknesses hither as I did, are at length totally freed from them."§

Dr. Cheyne makes a similar remark.—"In all the Ottoman empire, where little flesh meat, and no wine is used; and in Spain where they use them very moderately; and among the mountaineers in Northern countries, and the lower rank of people in every country, where they can procure neither, there is little or no gout."

3. *Effects of intemperance in the production of disease.* The state of health of the inhabitants of nations where intoxicating liquors are used, presents a striking but deplorable contrast to the statements just made. Disease in its most fearful forms, on every hand, exhibits its dreadful ravages, and the human machine, adapted by an all-wise providence, when rightly used, to perform its functions in health and vigor, is ever the subject of disorder. The almost universal use of inebriating drinks, undoubtedly is the most fruitful source of this derangement of the physical powers.

Dr. Lamb, a medical gentleman of attainments and research, is of opinion, "that the habitual use of fermented liquors, is a cause of destruction, sufficient of itself to counteract all the good effects of a diet by no means insalubrious, and of a situation which is more than commonly healthful;" and that "as large quantities of fermented liquors are highly deleterious, producing a total loss of muscular power, and nearly an abolition of correct sensation; and as these symptoms are not unfrequently fatal, the suspicion appears just, that the perpetual ingurgitation of these drinks, cannot be innocent, *however moderate the quantity may be*; and that all the pleasure or the comfort which persons derive from such habits, are gained at the ultimate expense of their health, and the abbreviation of their lives."*

Dr. Cheyne, late physician-general in Ireland, makes the following pointed observations.—"If an end were put to the drinking of port, punch, and porter, there would be an end to my worldly prosperity. Physicians, surgeons, and apothecaries, would be ruined; the medical halls would be stripped of their splendour; and disease become comparatively rare, simple, and manageable; the clinical physician would lose the benefit of teaching, and the student the opportunity of learning his profession, in our flourishing hospitals."†

"Intoxicating liquors," says Dr. Trotter, "in all their forms, and however disguised, are the most productive cause of disease with which I am acquainted."‡

The effects of intemperance in the production of disease, will receive special consideration in subsequent sections of this work. In the present place, the attention of the reader will be drawn to some general

* Havelock's Narrative, &c.

† Ure's Chemical Dictionary, article, "Calculus."

‡ Travels through Lapland.

|| Tavernier's Persian Travels, vol. i. p. 239.—Folio edition. § Ibid. vol. ii. p. 81.

* Report's on Regimen, p. 257, 8vo. 1815.

† Statement of Certain Effects of Temp. Soc. p. 1, 1829.

‡ Essay on Drunkenness.

facts, illustrative of the extent of this productive source of physical derangement.

The introduction of ardent spirits into general use, imparted increased virulence to the character of those diseases which had their origin in the use of intoxicating liquors; indeed it was soon found that *new diseases* began to make their appearance from the same source. "Since the introduction of spirituous liquors into such general use," observes Dr. Rush, "physicians have remarked, that a number of new diseases have appeared among us, and have described many new symptoms as common to old diseases."* The consequences of spirit drinking were so serious in 1725, as to cause the College of Physicians to make public representation of them;† and in 1750, when these pernicious poisons were so generally used, the same body stated, that they had 14,000 gin cases under their care, most of which baffled all their skill in medicine.‡

Dr. Short also calls our attention to the great increase of disease in London, which resulted from the use of spirituous liquors.||

In Dublin the physicians at these periods, experience much difficulty in the control of diseases, either brought on or aggravated by the use of ardent spirits. These were so fearful in their extent, and so virulent in their character, as to occasion considerable alarm for the health of the public. The reports of hospitals and dispensaries, abound with allusions to the vast number of diseases which existed at that time, all of which arose from the same prolific source.

The health of the people, both in England and Ireland, improved in a remarkable degree after the act (of 1751) for stopping distillation, had been put into operation. Dr. Price specially notices this circumstance, and states, that the increased health in London arose "particularly from the destructive use of spirituous liquors among the poor having been checked."§

The Reports of the Fever Hospital, Cork Street, and Sick Poor Institution, Meath Street, Dublin; show, that during the prohibition to distillation from corn, which continued from June, 1808, to December, 1809, by which the use of spirituous liquors was diminished, the number of sick applying for medical aid at those institutions, had decreased to a considerable extent; while on the other hand, when the removal of this prohibition rendered spirits plentiful and cheap, disease again made its appearance in exact proportion.

There were, for example, admitted into

the Cork Street fever hospital, in the years ending 31st of December,

In 1807..1100 Patients.

„ 1808..1071 „

„ 1809..1051 „

And when the prohibition to distillation ceased in } 1810..1774 „ *

At the sick poor institution there were received:—

In 1808..8139 Patients.

„ 1809..8069 „

„ 1810..9075. „ †

The returns from the Waterford fever hospital and dispensary, display similar results. There were admitted into the

Fever Hospital.	Dispensary.
In 1807.. 166 Patients.	.... Patients.
„ 1808.. 157 „	4227 „
„ 1809.. 222 „ „
„ 1810.. 410 „ ‡	5708 „ ||

The medical attendants of the latter hospitals state, that "the late reduction in the price of spirits and their consequent excessive use, has been productive of increased disease, and in a great degree accounts for the additional number of patients in the above charities for the last year." The facts might be multiplied to a considerable extent.

More recent investigation exhibits equally decisive results. Dr. Gordon, physician to the London Hospital, states, that several years ago, his attention was directed to the subject of intemperance and disease, when he was in the habit of seeing out-patients, to the amount of some thousands, probably, in the course of the year. In conversation with a friend, who felt an interest in the subject, he had occasion to remark, that the proportion of diseases which was distinctly referable to ardent spirits, might be about 25 per cent. His friend hesitated to admit the correctness of so large an average, and in consequence, Dr. Gordon kept an account for twelve months. I need not say, he remarks, that the result was not a mathematical truth, but merely an approximation; it amounted to 65 per cent. upon the whole amount of diseases, and at the same time I made every possible allowance that I could, and I even struck off part, wishing to look at the subject fairly. The result was 65 per cent. upon some thousands. My subsequent experience, remarks the same physician, induces me to say a larger number; my average came to 75 per cent., but I have stated 65, so that I might not over-step the bounds.¶

The universal testimony of medical men, shows that at least three-fourths of the disease which at present afflicts the human race, in

* Medical Observations by Dr. Rush, Philadelphia, 1793, vol. ii. p. 60.

† Ruffy's Natural History, vol. i. p. 72.

‡ Gents. Mag., vol. xxx. p. 21.

§ New Observations on Bills of Mortality. London, 1750, p. 210.

¶ Observations on Annuities by Dr. Price, Dublin, 1772, p. 150.

* Rep. Cork Street Fever Hospital, 1817, p. 56.

† Rep. Sick Poor Institution, 1817, p. 5.

‡ Rep. Waterford Fever Hospital, 1817, p. 13.

¶ Rep. Committee of House of Commons, 1811.

¶ Parl. Evid., p. 195.

countries where intoxicating liquors are in general use, arises from indulgence in strong drink. It appears from authentic documents, that about 287,000 poor persons, annually receive medical assistance and pecuniary aid from fifty-six institutions alone, and that a sum not less than £175,000 is expended every year by a benevolent public for their support. Two-thirds of this disease and expense is attributable to the use of inebriating drinks.

The following is a synoptical table of the *Classes, Orders, and Genera* of those diseased conditions of the human frame, which are induced by the use of alcoholic liquors.

CLASS I. PYREXIÆ, FEBRILE DISEASES.

Order 1. *Febres, Fevers.*

- Gen. { 1 Synocha, Inflammatory fever
2 Typhus, Putrid

Order 2. *Phlegmasiæ, Inflammations.*

- Gen. { 3 Ophthalmia, Inflammation of the eyes
4 Phrenitis, " brain
5 Pneumonia, " lungs
6 Carditis, " heart
7 Peritonitis, " peritoneum
8 Gastritis, " stomach
9 Enteritis, " bowels
10 Hepatitis, " liver
11 Splenitis, " spleen
12 Nephritis, " kidneys
13 Cystitis, " bladder
14 Gutta Rosacea, Crimson welks, or red pimples on the nose and face
15 Rheumatismus, Rheumatism
16 Podagra, Gout

Order 3. *Exanthemata, Eruptive Fevers.*

- Gen. { 17 Erysipelas, St. Anthony's Fire
18 Urticaria, Nettle-Rash
19 Aphtha, Thrush

Order 4. *Hæmorrhagiæ, Hæmorrhages.*

- Gen. { 20 Epistaxis, Bleeding at the Nose
21 Hæmoptysis, Spitting of Blood
22 Hæmatemesis, Vomiting of Blood
23 Hæmorrhoids, Piles
24 Menorrhagia, Overflow of the menses

Order 5. *Profluvia, Discharges.*

- Gen. { 25 Catarrhus, Catarrh
26 Dysentaria, Dysentery
27 Enteria, Inflammatory Diarrhæa

CLASS II. NEUROSES, NERVOUS DISEASES.

Order 1. *Comata, loss of sensation, thought, and voluntary motion.*

- Gen. { 28 Apoplexia, Apoplexy
29 Paralysis, Palsy

Order 2. *Adynamia, Defect of Vital Power.*

- Gen. { 30 Dyspepsia, Indigestion
31 Hypochondriasis, Low spirits

Order 3. *Spasmi, Spasmodic Diseases.*

- Gen. { 32 Tetanus, Locked Jaw
33 Convulsio, Convulsion
34 Epilepsia, Epilepsy
35 Asthma, Asthma
36 Palpitatio Cordis, Palpitation of the heart
37 Dyspnæa, Difficult breathing
38 Pyrosis, Water Brash
39 Colic, Colick
40 Cholera, Cholera
41 Diarrhæa, Purging
42 Diabetes, Excessive secretion of sweet Urine
43 Hysteria, Hysterics

Order 4. *Vesaniæ, Diseases of the Mind.*

- Gen. { 44 Amentia, Idiocy
45 Melancholia, Melancholy
46 Mania, Madness [trembling
47 Delirium Tremens, Delirium with
48 Oneirodynia, Night-mare

CLASS III. CACHEXIÆ, BAD HABITS OF BODY.

Order 1. *Marcores, Emaciation of the system.*

- Gen. { 49 Tabes, Wasting
50 Atrophia, No nourishment from food
51 Catacausis Ebriosa, Inebriate Combustion

Order 2. *Intumescentiæ, Swellings.*

Section 1. *Adiposæ, Fatty*

Section 2. *Flatuosæ, Flatulent*

Section 3. *Aquosæ, Dropsical.*

- Gen. { 52 Polysarcia, Corpulency
53 Flatulencia, Flatulence
54 Anasarca, Dropsy of the integuments
55 Hydrocephalus, Dropsy of the head
56 Hydrothorax, Dropsy of the chest
57 Ascites, Dropsy of the abdomen

Order 3. *Impetigines, Cutaneous Diseases.*

- Gen. { 58 Scrophula, King's Evil
59 Scorbutus, Scurvy
60 Icterus, Jaundice

CLASS IV. LOCALES, LOCAL DISEASES.

Order 1. *Dysæsthesiæ, Diseases of the senses.*

- Gen. { 61 Amaurosis, Gutta Serena
62 Anosmia, Diminished or total loss of smell
63 Agheustia, Diminished or total loss of taste
64 Anæsthesia, Diminished or total loss of touch

*Order 2. Dysorexia, Depraved appetites.**Sect. 1. Appetitus Erronei, false appetites.*

- Gen. { 65 Bulimia, Voracious appetite.
 66 Polydipsia, Constant thirst
 67 Pica, Depraved appetite.
 68 Satyriasis. Incontinence in men
 69 Nymphomania, — in women
Section 2. Appetitus deficientes,
deficient appetites.
 70 Anorexia, Bad Appetite.
 71 Anaphrodisia, Impotence.

Order 3. Apocenses, Increased discharges.

- Gen. 72 Eneuresis, involuntary micturition

Order 4. Epischesis, Obstructions.

- Gen. { 73 Obstipatio, Constipation
 74 Dysuria, Difficult micturition

Order 5. Tumores, Tumours.

- Gen. { 75 Aneurisma, Disease of the arteries
 76 Schirrus, Hardened tumour

Order 6. Ectopia, Displacement of organs.

- Gen. { 77 Hernia, Rupture
 78 Prolapsus, Protrusion uncovered
 79 Luxatio, Dislocation

Order 7. Dyalysis, Discontinuity of parts.

- Gen. { 80 Ulcus, an Ulcer
 81 Contusio, Bruise
 82 Fractura, Fracture
 83 Vulnus, Wound

4. *The mortality occasioned by intemperance* is no less a subject of alarm than the disease upon which it, in a great measure, depends. It may be said of intemperance, with much more truth than of war,—

"Tis the carnival of death;
 'Tis the vintage of the grave."

Milton, in the eleventh book of his *Paradise Lost*, says,

—————"Many shapes
 Of death, and many are the ways that lead
 To his grim cave, all dismal! yet to sense
 More terrible at th' entrance than within.
 ————Some by violent stroke shall die,
 By fire, flood, famine; by Intemperance more;
 In meats and drinks, which on the earth shall bring
 Diseases dire, of which a monstrous crew
 Before thee shall appear."

Lord Bacon makes the remark, that "not one man of a thousand dies a natural death; and that most diseases have their rise from intemperance." This observation, startling as it may appear, is no less appropriate than true in the present day.

We may divide this subject into two heads: 1. Mortality, the direct result of indulgence in strong drink; and 2. The mortality produced in one of the two following ways. 1st. Debility of the system from intemperance which renders it unable to grapple with disease, and 2ndly. A blunted susceptibility of the

physical powers, which unfits the system to receive the action of remedial agents, and consequently prevents the employment of those necessary means which alone can arrest the progress of disease.

The mortality comprehended under the second head will receive more particular consideration in subsequent sections of this division; it is our object in the present place, to consider such mortality as directly results from intemperance, abundant evidence of which is easily attainable.

I do not hesitate to affirm, says Linnaeus, the distinguished naturalist, that the use of spirituous liquors, in our time extremely prevalent among the common people, has destroyed more lives than all the wars which have taken off so many thousands of our fellow-citizens. "Spirituous liquors," exclaims Dr. Rush, "destroy more lives than the sword, war has its intervals of destruction, but spirits operate at all times and seasons upon human life."*

The celebrated Henry Fielding, in reference to the use of gin, made the following remarks, "Should the drinking this *poison* be continued in its present height, during the next twenty years, there will, by that time, be very few of the common people left to drink it."†

The history of distillation in this country teems with fruitful illustrations of the influence of intemperance on mortality. The London Bills of Mortality show that the number of deaths and burials in the metropolis corresponds with the consumption of spirituous liquors, and that every increase of consumption is attended with a corresponding increase of adult and infant mortality. On the other hand, a diminution of the consumption of alcoholic drinks is followed in a proportionate degree, by a diminution of the number of deaths.

The Bills of Mortality in 1729 rose to 29,722, in consequence of the unwise enactments passed at that period to extend the traffic in strong drink. To remedy this state of things the government interposed to check the evil by an increase of duty. The consumption of gin was consequently diminished, and, in 1730, the mortality was 26,761. The new enactment was obnoxious to the farmers, who conceived it to be detrimental to their interests. In 1732, at the time of its repeal, the mortality was 23,358. A recurrence, however, to previous habits of intemperance, was followed by an increase of mortality to 29,233. Similar results took place in the years 1742 and 1743, and also in 1751 and 1752. A striking illustration, however, in the rise and fall of mortality, as dependent on the consumption of strong drink, occurred in the years 1757 and 1758. In consequence of a scarcity of grain, distillation was suspended for three years. In 1757, the mortality was 21,313, but in 1758,

* Rush's Medical Observations. p. 63.

† An Inquiry into the Causes of the late increase of Street Robbers, &c. p. 22.

it was 17,520, being a decrease of no less than 3,793. In 1760, when distillation was resumed, the mortality increased, in one year, 1230. In 1792, an increased consumption of spirits was attended by no less an increase than 1453 deaths. On a suspension of distillation in 1796, in consequence of a scarcity of grain, the mortality in London sank 1891. The mortality, which in 1800 had risen to 23,068, in 1801, another season of scarcity, sank to 19,376, being a decrease of 3692. An advance of duty in 1803, occasioned a mutual decline, both in consumption and mortality. The decrease in the latter, in 1804—being 2,544. The same result took place in subsequent years.

The decrease in mortality, from the same cause, in 1809, as compared with 1808, was 3274—in 1814, as compared with 1813, 2464, and so on with regard to other periods. The returns after the operation of the *beer bill*, are imperfect. Sufficient evidence however exists to show that the extension of beer drinking was followed by an increase of disease and mortality. The total number of deaths in 1830 was 21,645—in 1831 it was 25,337, being an increase of 3692. Similar results took place throughout England and Wales. The following table exhibits the amount of consumption of intoxicating drinks, and the returns of mortality during the same periods.

Year.	British Spirits.	Rum.	Malt Liquor.	Mortality of England and Wales.	Increase of Deaths.	Decrease of Deaths.
1803	5,353,309	2,573,602	7,243,344	203,728		
1804	3,678,679	1,508,999	7,045,193	181,177		22,551
1808	5,384,394	2,174,751	7,281,603	200,713		
1809	630,340	2,160,625	7,195,920	191,471		9,242
1813	162,191	3,044,680	6,838,705	186,477		
1814	4,053,706	3,332,188	7,056,744	206,403	19,926	
1825	3,655,232	1,980,807	7,986,414	255,018		
1826	7,407,204	3,982,033	8,415,042	268,161	13,143	

The imposition of a high duty on spirits in 1803, and the high price of grain in 1809, occasioned a corresponding diminution in the number of deaths, while in 1814 and in 1826, an increase of mortality was the immediate issue in the one case of a resumption of distillation, and in the other a lowering of the duty on spirituous liquors. These statistical calculations do not at all furnish a record of the *total* number of deaths directly and indirectly caused by intemperance. They must be considered merely as relative indications. Nor on the other hand do they present an accurate or complete register of the deaths which in the years in question occurred in the metropolis. The five large parishes of St. Pancras, Mary-le-bone, Hampstead, Kensington, and Chelsea, are excluded altogether from the general Bills. In many other respects also these returns are incomplete. They form however, pretty accurate approximations to the truth, certainly *below the mark*, and convey important lessons of warning and reflection to the moralist and legislator. A variety of additional tables illustrative of the subject might be adduced. Two or three only will serve our present purpose.

For ten years previous to 1751, (the year when distillation was prohibited) the annual average of deaths above christenings, in London, had been 10,894
For the ten years which succeeded, when the use of spirits was restrained, the annual average was but 5,670
The average of deaths by fever alone, for 10 years preceding 1751, was annually 4,351
For the ten years after 1751, it was but 2,565
The deaths recorded as the result of excessive drinking on an average of ten years previous to 1761, amounted annually to 33
In the succeeding ten years, they averaged but 8
The general mortality and deaths by fever, which were diminished by the partial restriction of 1751, sank still lower after the total prohibition of distillation, which took place between the years 1757 and 1760. A removal of the prohibition on the other hand caused an increase in the number of burials in proportion to the baptisms.

The following table clearly demonstrates this important fact :

Years.	Excess of deaths above christenings.	Deaths by fever.	Deaths by excessive drinking.
1755	6,708	3,012	8
1756	6,033	2,579	11
1757	7,240	2,569	7
1758	3,367	2,472	2
1759	5,351	2,314	2
1760	4,579	2,136	6
1761	5 083	2,457	—
1762	11,010	3,414	—
1763	11,005	3,742	—

The same results took place in Ireland. According to the Dublin Bills of Mortality, it appears, that during the prohibition of distillation, which continued from March 25th, 1758, to September 1st, 1759, the number of baptisms within the city, exceeded that of the burials. Before the enforcement of the prohibition, however, and after its removal, the number of burials exceeded that of the christenings. In 1759, moreover, during the prohibition, the deaths by fever were one-fourth less than in 1760, when distillation was permitted and an increase of consumption took place.

DUBLIN BILLS OF MORTALITY.

Years.	Buried.	Baptised.	Died of fever.
1757*	1926	1837	—
1758† Males Females	653	692	—
	705	691	
	1358	1383	
1759‡ Males Females	889	854	669
	863	876	
	1752	1730	
1760 Males Females	1003	819	869
	990	896	
	1993	1715	

The London Bills of Mortality acquaint us with the fact, that between 1721 and 1750, (the period when distillation was encouraged) there were nearly as many deaths from intoxication in one year, as there were during the whole thirty years between 1686 and 1715, when spirits were not in general use.

The number of deaths from intoxication in Dublin, between 1746 and 1757, was more than double the number that had died in the entire of the preceding twenty years, when there was not the same general use of spirituous liquors.

In the three years prior to the restriction on distillation, the annual average of deaths by "excessive drinking" in London, was *twenty-one* ; in the three years after that partial restriction, the deaths averaged only *twelve*. In the three years, between 1757 and 1760, during the total prohibition of distillation, the annual average of deaths was but *three*.

The same effects were produced in Dublin. In the years 1758 and 1759, when distillation was prohibited, not a single case of death by intoxication was registered in the Bills of Mortality. The average, however, of the ten preceding years, had been nearly *seven* cases annually.

The Bills of Mortality in Glasgow present similar results. A considerable increase of mortality took place after 1822, in which year the duty on spirits was reduced. In 1821, the number of deaths was 3686 ; in 1822, 3690 ; from which it appears that there was but an increase of four. In 1823 the reduction of duties began to evidence its effects, and the mortality rose to 4627, that is an increase of 937 ; and in 1824, it amounted to 4670 ; showing, as compared with 1822, an increase of no less than 980.* This awful mortality exceeded very much that which occurred in the years 1821 and 1827, when during the former period a contagious fever was prevalent, and during the latter, the working classes had for more than twelve months to struggle with extreme destitution.

Mr. Corbyn Morris states, as a consequence of the very general use of ardent spirits, the loss of 80,000 infants in the course of twenty years, a mortality unparalleled in the annals of human misery.

Mr. Muret informs us, that he had the curiosity to examine the register of deaths in one town, and to mark those which might be imputed to drunkenness ; and he found the number so great, as to lead him to conclude, that hard drinking kills more of mankind, than pleurisies and fevers, and all the most malignant distempers.† Dr. Willan's testimony coincides with the preceding. "The intemperate use of spirituous liquors," he remarks, "has been found, by experience, more destructive to the labouring class of people in cities and manufacturing towns, than all the injuries accruing from unhealthy seasons, impure air, infection, and close confinement to work within doors, or much fatigue without. It is likewise ascertained, that the same bad habit not only produces tedious and peculiar maladies, but

* Dublin Journal, Dec. 31st, 1757.
† Sleater's Dublin Gazette, Dec. 30th, 1758.
‡ Ibid. Jan., 1760. || Ibid. Jan., 1761.

* Cleland's Statistics of Glasgow.
† Price on Reversionary Payments, vol. ii. p. 250.

is often the means of rendering inveterate, or even fatal, many diseases of the throat and lungs; also fevers, and inflammations of the bowels, liver, kidneys, &c., which would have otherwise readily yielded to proper medical treatment. On comparing my own observations with the Bills of Mortality, I am convinced, that considerably more than one-eighth of all the deaths which take place in the metropolis, in persons above twenty years old, happen prematurely, through excess in drinking spirits."*

At the annual meeting of the Pennsylvania Temperance Society, held in Philadelphia, 1828, Dr. J. R. Mitchell, in the course of an address delivered on that occasion, stated, that "one-sixth of the deaths reported in the weekly Bills of Mortality, in the city of Philadelphia, were occasioned directly or indirectly, by the use of spirituous liquor." The number of deaths reported during the year 1828, was 4292; one-sixth of which was 715 $\frac{1}{3}$. In Portsmouth, New Hampshire, according to authentic documents, a few years ago, twenty-one persons, or three for every 1000, died by excess in drinking. The last census gave 7327, as the number of its inhabitants. This calculation gives a gross amount of mortality in the whole United States, estimating the population at 6,000,000, to the appalling extent of 36,000 per annum. A physician of Philadelphia, remarks, that the Bills of Mortality are below and not above the truth, as he states in many instances, to avoid wounding the feelings of surviving relatives; the deaths of drunkards are reported under the heads of various diseases, as for example, apoplexy, inflammation of the brain, &c. The statements are fully borne out, by extended inquiries on the part of persons eminently qualified to undertake the task, by their knowledge as well as station in society.

Professor Hitchcock, for example, estimates, that from 30,000 to 50,000 persons die prematurely every year, in the United States, from the use of intoxicating compounds.†

Judge Cranch calculates the number at 37,500. Other estimates, however, make it what seems most probably nearer to the fact, at least 50,000.

The general mortality in the United States is said to be about one in forty-six per annum. That, however, among persons who indulge in intoxicating liquors is as high as one in ten. In one instance on record, a diminution of 40 per cent. on the general mortality took place, after the establishment of a Temperance Society.

Mr. Chipman, a most indefatigable investigator of temperance statistics, in three counties which he has examined, ascertains from indisputable sources, that one-third of the mortality among the adult male population in those counties, is from intemper-

ance; that this vice shortens human life on an average twelve years, and that nineteen-twentieths of its victims are heads of families*

In Russia, where ardent spirits are freely used, Dr. Storch states the amazing fact, that of persons between twenty and sixty years of age, 817 die out of 1,000. "Unfortunately," he adds, "the Bills of Mortality leave us no doubt on this subject—they show that this great mortality affects mostly the male sex, and that it is occasioned chiefly by *inflammatory fevers* and *consumptions*, that is, by diseases, the immediate effects of strong liquors.†

Sweden, not long ago, presented a melancholy example of the mortality occasioned by the free use of ardent spirits. The list of births and of deaths in Stockholm, exhibited the alarming fact, that there *died in one year 1,439 persons more than were born*. The larger proportion of deaths occurred amongst the garrisons, in consequence of the soldiers drinking immoderately of brandy.

Mr. Scozer states, that in 1764 from the same cause, the city of St. Petersburg annually lost 635 individuals, chiefly young men from twenty to twenty-five years of age.

Voltaire, in his history of Charles XII. king of Sweden, tells us, that the men of that country are larger, very healthy, and that "they live even to a greater age than other men *when not debilitated by the immoderate use of wine and strong liquors*."‡

Mr. Kerseboom states, that in Holland, during the space of one hundred and twenty-five years, females in all accidents of age, lived three or four years longer than a similar number of males. In this country there are 400 *distilleries* alone, which each, at an average, produce about 4992 ankers per annum. Mr. Duncan in his tables informs us, that the proportion of mortality in Glasgow, like that in Holland, preponderates decidedly against the males from the age of fifteen upwards. Among these the greatest mortality prevails from the age of twenty-three to twenty-nine, a period during which they freely indulge in intemperate habits.

Lord Bacon attributes the superior longevity of women as compared with males, to the circumstances of the lives of the latter being prematurely worn out by unnatural excitement. This circumstance sufficiently explains the preceding facts.

Perhaps the most striking examples of disease and mortality, arising from intemperance and other causes more or less connected with it, may be found in the present condition of those primitive tribes who have been adduced as illustrations of the advantages of a temperate life. In the islands of the South Sea, and in New Zealand, the most heart-rending contrast is now pre-

* Dr. Willan on the Diseases of London.

† Lectures on Diet, Regimen and Employment, by Prof. Hitchcock, 1830.

* Rep. Amer. Temp. Soc., 1838, p. 63.

† Storch's Statistical Account of Russia.

‡ Hist. Charles XII. chap. i.

sented to their former comparative state of health and happiness. Disease and mortality, almost unparalleled in character, arising from the introduction of ardent spirits by traders from Christian countries, not long ago, threatened to depopulate these islands in a very few years; and missionary exertions alone have saved them from that fate. The population of the Sandwich Islands, for instance, during Captain Cook's first visit, is stated by Dr. Chapin, late resident missionary, to have been not less than 400,000. Estimating a period of fifty-seven years since their discovery by Europeans, and also taking into account losses occasioned by their wars, the same writer supposes with great reason, that their population should in this time have been increased at least one-half; making a probable total of 600,000. The terrible fact, however, is now well known, that the population of these islands only amounts at the present time to 135,000; making the fearful loss during fifty-seven years, of not less than 465,000, which he adds, is "chargeable to the customs and vices carried there from other places."*

These appalling facts will excite less surprise, when it is known on the authority of Mr. Ellis, that a sum of not less than 12,000 dollars was expended in *Tahiti* alone, during one year for ardent spirits.

Another lamentable example is found in the unhappy Aborigines of the North American States. A gentleman residing in the Indian country, remarks, that it appears to him, that the Creeks are devoted to destruction. They are deluged with whiskey, and "*of the 18,000 who were alive last May, and settled on the south side of the Arkansas river, there are now but 9000 on earth, the rest in eternity.*"†

In hot climates the same results follow indulgence in spirituous liquors. "Dram drinking," remarks Dr. Annesley, who resided twenty years in that country, "destroys more lives in India than climate or the sword." Major Archer relates a curious fact in reference to intemperance and mortality in India. The *Sikhs* are determined drunkards and inordinate devourers of opium, habits which "almost always superinduce a premature and disgraceful death." They drink, he adds, to such an excess as to overcome every worthy pursuit, and even nature herself: hence the great number of widows in possession of landed property, the owners having left no male heirs. The East India Company become proprietors of estates to a great extent, from this cause, from a lack of inheritors. Two instances of this kind happened during Major Archer's residence of not more than eight months.‡ One of the medical gentlemen connected with

the expedition of Lander, and who was with that unfortunate traveller when he was shot, tells us that the great cause of mortality in Africa amongst Europeans was entirely owing to the use of spirituous liquors, and that the very few who refrained from them generally returned home in as good a state of health as when they went out.*

The estimated population of England and Wales in the middle of the year 1838, and the number of registered deaths were as follows:—

	Males.	Females.	Total.
Population	7,665,245	7,885,615	15,553,860
Registered Deaths	175,044	167,485	342,529

The following is an *abstract of the causes of death in England and Wales in the year 1838, in 342,529 cases.*

1. *Epidemic &c., Diseases.*—Small Pox, 16,268; Measles, 6,514; Scarlatina, 5,802; Hooping-cough, 9,107; Croup, 4,463; Thrush, 1,090; Diarrhoea, 2,482; Dysentery, 627; Cholera, 331; Influenza, 806; Ague, 44; Remittent Fever, 182; Typhus, 18,775; Erysipelas, 1,203; Syphilis, 159; Hydrophobia, 24. Total, 67,877.

2. *Nervous Diseases.*—Cephalitis, 2,178; Hydrocephalus, 7,672; Apoplexy, 5,630; Paralysis, 4,975; Convulsions, 26,047; Tetanus, 129; Chorea, 24; Epilepsy, 1,093; Insanity, 367; Delirium Tremens, 182; Disease, 1,407. Total, 49,704.

3. *Respiratory Diseases.*—Laryngitis, 99; Quinsy, 432; Bronchitis, 2,066; Pleurisy, 582; Pneumonia, 17,999; Hydrothorax, 2,306; Asthma, 5,745; Consumption, 59,025; Disease, 2,568. Total, 90,823.

4. *Diseases of the Organs of Circulation.*—Pericarditis, 124; Aneurism, 119; Disease, 3,319. Total, 3,562.

5. *Diseases of the Intestinal Canal.*—Teething, 4,404; Gastritis Enteritis, 6,061; Peritonitis, 168; Tabes Mesenterica, 724; Worms, 749; Ascites, 63; Ulceration, 256; Hernia, 507; Colic or Ileus, 619; Intussusception, 238; Stricture, 111; Hæmatemesis, 111; Disease, 1,385. Total, 15,396.

6. *Diseases of other Digestive Organs.*—Disease, (*Pancreas*) 3; *Liver*; Hepatitis, 449; Jaundice, 841; Disease, 590; Disease, (*Spleen*) 27. Total, 1,910.

7. *Diseases of the Urinary Organs.*—Nephritis, 157; Ischuria, 70; Diabetes, 207; Cystitis, 128; Stone, 320; Stricture, 59; Diseases, 710. Total, 1,651.

8. *Diseases of the Generative Organs.*—Child-bed, 2,811; Paramenia, 69; Ovarian Dropsy, 45; Disease, 338. Total, 3,263.

9. *Diseases of the Motive Organs.*—Arthritis, 15; Rheumatism, 1,030; Disease, 1,056. Total, 2,102.

10. *Diseases of the Integumentary Organs.*—Carbuncle, 35; Phlegmon, 16; Ulcer, 162; Fistula, 100; Disease, 107. Total, 420.

11. *Deaths from other Diseases, &c.*—Inflammation, 5,816; Hemorrhage, 1,218;

* Remarks on the Sandwich Islands, by Alonzo Chapin, M.D.

† Rep. Amer. Temp. Union, 1823, p. 55.

‡ Tour in Upper India, &c., chap. 8.

* Parl. Evid. p. 337.

Dropsy, 12,342; Abseess, 1,478; Mortification, 1,343; Purpura, 58; Scrofula, 1,119; Carcinoma, 2,448; Tumour, 373; Gout, 207; Atrophy, 2,018; Debility, 12,634; Malformation, 166; Sudden death, 3,012; Diseases of uncertain seat, 44,232; Old age, 35,564. Intemperance, 161; Starvation by cold, want, &c., 167; Violent Deaths, 11,727. Total, 12,055. Causes not specified, 11,970. *Total number of deaths in the year 1838, 342,529.*

It is perhaps impossible to estimate the great variety of diseases in the above table, which are either induced or aggravated by the use of inebriating liquors: an estimate which, if traced to its issues, would include an amount not much less than the whole. In succeeding sections this subject will receive more special consideration.

The causes of death were assigned in 330,559 instances. In the cases, however, of 6,465 males, and 5,505 females, they were not specified. It is therefore assumed that they were the same as in the specified cases. In general terms we may state that there died in the year, 36,799 persons of *inflammations*; 85,506 from *specific inflammations*; 19,122 from the *terminations of inflammations*; 15,125 from *hæmorrhages*; 2,256 from *disordered secretions*; 2,512 from *depraved nutrition*; 44,773 from *disorders of the nervous system*; 35,564 from *old age or natural decay*; and 11,727 from *violent deaths*.

In this interesting table we perceive that a large proportion of deaths in this country, are induced by various kinds of inflammations and their terminations. Perhaps not less than four-fifths of all the diseases enumerated are, more or less, of an inflammatory description. The reader may thus estimate the consequences of the habitual ingurgitation of inebriating liquors, to persons in a state of health, a practice indeed which is not only directly productive of physical derangement, but in innumerable other cases induces a condition most favourable to the development of disease on otherwise trivial occasions. A mere cold, for example, in peculiar habits, where the system is inflamed by strong drink, suffices to bring on an attack of erysipelas,—indulgence in improper food to an extent not of much consequence to persons in a state of health, is, in such a condition, sufficient to induce an attack of diarrhæa, or what is not uncommon, to persons debilitated by habits of intemperance, on occasions of extraordinary excitement, bodily or mental, some still more serious consequences ensue, as, for instance, hæmorrhage, or rupture of an important blood vessel.

Intemperance exercises a similar influence on almost every other class of diseases enumerated in the above table of mortality, whether in relation to the organs of digestion, respiration, or to the more important functions of the nervous system. Under the head Insanity no less than 367 cases

are enumerated; *Delirium Tremens* 182; *Sudden Deaths*, 3,012; *Intemperance*, 161; and *Starvation by cold, want, &c.*, 167. In a correspondence between the Poor Law Commissioners and Mr. Farr, the former remark that in several cases of alleged starvation, the deaths were occasioned by extreme ignorance in regard to the diet of infants, on the loss of the mother, such as giving them gin instead of proper sustenance. Exposure to cold, also, in a state of intoxication was the cause of death in several of the cases ascribed to starvation. The increase of mortality in the year 1840, ending 30th June, as compared with the previous twelve months, was nine on sixteen, or 4.16 per cent. This increase was principally in the manufacturing, or spirit-drinking, districts. "When we consider that the value of life, among the upper and middle classes, has decidedly improved, as shown by the alterations in insurance policies, as well as by general observation, how fearful must be the increase of disease and mortality amongst the poor!"* This increase of mortality corresponds with the increased consumption of ardent spirits.

The following is the Bill of Mortality, for the city and liberties of Philadelphia, for the year 1829.

Atrophy, 31; Apoplexy, 21; Convulsions, 258; Epilepsy, 15; Inflammation of the Brain, 60; Inflammation of the Breast, 30; Inflammation of the Liver, 54; Inflammation of the Stomach, 22; Inflammation of the Bowels, 73; Dropsy, 78; Dropsy of the Breast, 38; Consumption, 587; Palsy, 31; Insanity, 16; Diarrhæa, 99; Debility, 277; Fevers of various kinds, 423; Total, 2113.

To this table must be added the following:—Found dead, 13; Casualties, 19; Drowned, 48; Death by Opium, 1; Suicide, 13; Sudden, 66; Violence, 6; Unknown, 68; *Drunkenness*, 28; *Mania a Potu*, 55. Total, 317.

A distinguished physician of the city in a brief commentary on this table, remarks that respectable families are often afflicted by members who fall a sacrifice to their indulgence in spirituous liquors: and the medical man who prepares a certificate of the case (required previous to the burial of the deceased) cannot employ the disgraceful and shocking terms "*drunkenness*," or "*mania a Potu*," which would give great offence, and deeply wound the feelings of a family already much distressed. The disease is therefore denominated "*Inflammation of the brain, insanity*," &c., although these alleged causes of death, are altogether the consequence of intemperance. In addition to these, he further remarks, that there are deaths, which occur suddenly among dram drinkers, which do not come under the notice of medical men, which are reported under the heads, "*Sudden, Found dead*." In the

* Facts and Figures. No. iv., pp. 51, 52.

above statement, *seventy-nine* such cases are enumerated, the majority of which were caused by drunkenness. The same physician feels warranted in the opinion that more than three times the number stated in the Bill to have died from drunkenness, and mania a potu, (83) that is, two hundred and forty-nine, may be attributed to the use of spirituous liquors. To these we must add numerous diseases produced by the use of spirits, which often terminate fatally, such, for example, as apoplexy, drop-y, diarrhœa, palsy, debility, &c, a considerable proportion of the febrile and inflammatory complaints, and many of the deaths reported under "*Casualties*" and "*Drowning*." There were 337 deaths in the alms-house alone during the same year. The average number of paupers at that period was about 900. A very large majority of them were well known to be habitual tipplers.

Suicide is an act the common result of intemperance. In Manchester, according to the report of the coroner, October 30th, 1830, *not less than thirty-four persons, within the previous three months*, had been led to commit this act by excessive drinking. Professor Casper publishes a list of 218 cases of suicide, the causes of which were known. Fifty-four were the effects of drunkenness and dissipation. Several cases in point will be noted in the Reports of Coroners' Inquests. They are in fact of ordinary occurrence. Few persons indeed would venture to commit so rash an act unless at the time under the excitement of liquor, or in that depressed state of the mind which invariably follows indulgence in strong drink.

The *Reports of Coroners' Inquests* teem with melancholy examples occasioned by intemperance. Doctor B. Reilly prepared the following tabular list of two hundred and forty-four cases as reported in the newspapers in the space of eight months. Sixty were of death by drowning, of forty of which intoxication had been the immediate or existing cause; seventy were cases of suffocation, sixty of which had been occasioned by intemperance, directly or remotely; thirteen deaths by stoning or other bruises, the effects of the same vice; eight murders, six of which were committed under the excitement of drink; deaths by burning, five, of which four had been caused by drunkenness; deaths by falls from elevated situations, six, four of which had occurred through the same means. In addition to these there were many sudden deaths, five of which were attributable to the same source, which, with accidental deaths by gun-shot, &c., would amount to at least *two hundred* out of the number stated, as having their origin, directly or indirectly in intemperance. In the county of Westmeath, there were 60 inquests for the years 1836 and 1837, in which the cause of death, in thirty cases out of that number was proved to have been intoxication, directly or indirectly. Probably many more

of these cases, if analyzed, might have been traced to the same cause.

H. Fitzgerald, Esq., late mayor of Limerick, made the following statement, in 1840. "I have held about one hundred and forty inquests since the 1st October, 1838, and I can safely affirm that *one half that number was caused directly by intoxicating liquors*. There were eight cases of death by drowning, several by burning, and many from apoplexy, while in a state of intoxication; and within a short period, four individuals committed suicide, while under the hellish influence of strong drink."

Not a day passes in England without some melancholy occurrence of the same kind. In 1831 in the town and immediate neighbourhood of Manchester, thirty-nine men and women suddenly died in one quarter from the effects of drunkenness. Four carters, moreover, lost their lives by careless driving while in a state of intoxication.

In March, 1837, Mr. Badger, the coroner of Sheffield, within the short space of ten days, had occasion to hold inquests on thirteen persons who came to their deaths by accidents wholly arising from intemperance.

The Rev. Dr. Scoresby, when residing in Liverpool, states, that in 1829, as the Minutes of Evidence before the coroner testify, there were thirty-one cases, of which nine were females, under the verdicts of "accidental death," "found drowned," "found dead," "lunacy," &c., which were the direct effects of drunkenness, besides others of a suspicious nature. Some of these cases were of a peculiarly affecting character. "One man, when *in a state of intoxication*, fell into a hot water-tub of a brewer, and was *scalded to death*, and several different persons fell into the docks or river and were *drowned*. A female, having been drinking in a public-house, received an *injury in a quarrel*, of which she almost immediately died; another woman, much addicted to drinking, was *burnt to death*; another, of similar habits, when apparently tipsy, *jumped out of a window* and was *killed*; another unhappy female, who was described in the Minutes of the Inquest as a very disorderly person, having been taken to the bridewell for safe custody, when in a state of inebriety *hanged* herself. One man met his death by drinking in a very extraordinary manner; leaning on the side of a puncheon of rum, lying on the dock quay, he indulged himself in the stolen draught by sucking it through a reed, the effect of which was almost immediately fatal. Another man, who had been very much intoxicated the night before, under the depression of returning sobriety, *cut his throat*; and another of similar habits *hanged* himself. One person in a more respectable situation of life, died of a *rapid disease*, stated at the inquest to be hurried on by *excessive drinking*. Two boatmen, in a drunken quarrel

on the river, *fell overboard* and were both *drowned*. One individual, when *half intoxicated*, fell only from the steps in front of a house, and was *killed* on the spot. Another unhappy man, who had just been released out of gaol, went almost direct to the public-house, to which, after an interval, he returned a second time, and when he retired to bed he fell into a lethargic sleep, from which he never awoke. A woman accustomed to drinking, accompanied a sister in iniquity to a *social revel*, where they drank till *intoxicated*; then returning to the house which one of them occupied, they went together to bed, but during the night, one of them was taken to an eternal world whilst the other slept. Another wretched creature, pursuing the same destructive habit, was returning to her home in a state of drunkenness, when she *fell into the opening of a cellar*, and was *killed* on the spot. Besides these cases, two instances occurred in the same year of the death of children through the drunkenness of their parents. In one case, which happened on the sabbath, a wretched woman *drank to excess*; when, in a quarrel with a lodger in the house, she received a push, which threw her off her balance, when, staggering, she *fell upon her poor tottering infant* and *killed* it in a moment. In the other case, an infant child was taken to bed by its parents, both being in a state of intoxication, when, in the insensibility produced by the dissipation, the *child was overlaid* and *smothered*, by the wretched creatures who had given it birth.”*

The same gentleman states, that taking the proportion in Liverpool as the datum, the probable amount of “*sudden and violent mortality*” throughout the United Kingdom, would be 6,400 individuals annually, but he remarks, “I believe the mortality produced or hastened by excessive drinking, and occurring in hospitals and infirmaries, &c., to be *six times the number*,” that is 38,400 persons, a number undoubtedly considerably below the actual amount.†

At an inquest held, June, 1839, on a person who had died from the effects of intemperance, Mr. Wakley, coroner, made the following remarks:—“I think intoxication likely to be the cause of one-half the inquests that are held.” Mr. Bell, the clerk to the inquests, observed, that the proportion of deaths so occasioned, was supposed to be three out of five. “Then,” said Mr. Wakley, “there are annually 1,500 inquests in the Western division of Middlesex, and according to that ratio, 900 of the deaths are produced by HARD DRINKING.—I am surprised that the legislature, which is so justly particular about *chemists and druggists* vending poison, is not equally so with the *vendors of gin*, which appears to

cause such a dreadful waste of human life.” Not long afterwards, a similar inquest was held by the same gentleman, on which occasion he made the observations which follow:—“I have lately seen so much of the evil effects of gin-drinking, that I am inclined to become a teetotaler. Gin may be thought the best friend I have: *it causes me to hold annually 1000 inquests more than I should otherwise hold*. But, besides these, I have reason to believe that *from 10,000 to 15,000 persons die in this metropolis ANNUALLY from the effects of gin-drinking, upon whom no inquests are held!* Since I have been coroner I have seen so many murders, by poison, by drowning, by hanging, by cutting the throat, in consequence of drinking ardent spirits, that I am astonished the legislature does not interfere. I am confident that they will, before long, be obliged to interfere with respect to the sale of liquors containing alcohol. *The GIN-SELLER should be made as responsible as the CHEMIST and DRUGGIST*. And I think it is right the publicans should know that *even now* they are, to a certain extent, responsible in the eye of the law. If a publican allows a man to stand at his bar, and serves him with several glasses of liquor, and sees him drink till he gets intoxicated; and if that man should afterwards die, and a surgeon should depose that his death was accelerated by the liquor so drunk, *then would the publican be liable to be punished FOR HAVING AIDED TO BRING ABOUT THAT DEATH.*”

The reports of inquests in the United States are equally strong and conclusive. Of 33 persons found dead in one city; 29 were killed by intemperance. Of 77 persons found dead in different places, the deaths of 67 were occasioned by strong drink. In two districts in Upper Canada 38 out of 44 inquests, were in cases of death caused by intemperance. These facts might be multiplied to an almost incalculable extent.

The influence of intemperance on *mortality among our soldiers* has been a subject of frequent observation of late years. The facts which are at present known, testify that a considerable proportion of the mortality among soldiers is occasioned by their habits of indulgence.

The army of Sir John Moore, during their retreat to Corunna, were, by necessity, deprived of their usual allowance of wine. From that time it was remarked that they improved very much in their health and appearance. The 45th regiment, according to Dr. Rollo, during their residence at Grenada, were visited during a remarkably healthy season, with an uncommon mortality, twenty-six out of ninety-six dying within a few weeks. On investigating the cause of mortality, it was found to originate in a custom which the men had contracted, of swallowing every morning a glass of raw spirits. An officer of high rank, states, that in 1801, in the West Indies, almost entirely

* Parl. Evid., p. 380.

† Ibid. 380.

from the use of rum, 450 men out of 1000, composing his regiment, were buried in four months.*

Captain T. H. Davies observes a remarkable difference in the mortality between the officers and soldiers. When stationed for four years at Trincomalee, an unhealthy situation, this was very evident. So far as he could recollect, they did not lose one officer during that period, while the casualties among the men (who were free drinkers) were between the 10th and 12th of the whole number.†

The following information was obtained by Dr. Cheyne, from the staff and regimental officer of the British army through the medium of Mr. W. Burke, inspector general of His Majesty's hospitals. Two-thirds of the diseases and deaths of Europeans in India, are in consequence of their indulging in spirituous liquors, and exposing themselves unnecessarily to the sun during the hottest time of the day. At Meerut and Cawnpore there occur every year several cases of sudden death from soldiers exposing themselves to the sun while intoxicated.

The officers and civilians at the stations, like the natives, enjoy excellent health. At one large station, called Meerut, composed of 200 Europeans, civil servants, and military officers and their families; during two years and a half, not one of the number had died from disease; among the European soldiers, however, (His Majesty's service, and the Hon. Company's service) the annual average of deaths was nearly five per cent. At the same station, the average of deaths in native troops was one per cent. There is no reason, continues the writer of this report, why the European soldier in India, should not be as healthy as the officers. He is not necessarily, more exposed to the sun and heat of the climate, in fact, hardly so much as they are, while employed in the discharge of their regimental and station duties. He has wholesome bread and meat as he would get in England.‡

Lord Valentia, in his travels, remarks, that one of the greatest evils in India, is the cheapness of spirituous liquors, which "leads to a dreadful mortality among the European soldiers, particularly on their first arrival."

A resident at Delhi, East Indies, December, 1839, who himself with several others, had experienced remarkable benefit from abstinence, thus writes, "The natives here seldom or never taste spirits among themselves, and this accounts for their escaping the fevers and diseases which kills so many Europeans."

A distinguished officer of the army in the United States, remarks, that in looking over the sick list, with the acting surgeon and hospital steward at his elbow, to tell him of each man's sickness, he was assured that,

out of forty-six cases, the diseases of more than forty had their origin in intemperance. He also gave it as his opinion that since his acquaintance with the army, more than three-fourths of the deaths among the soldiers were occasioned by ardent spirits.*

Fort Gibson was considered the most unhealthy post in the United States, and from thence called the "grave-yard of the army." Intemperance was the main cause of this mortality. One of the surgeons who resided several years at this post, previous to 1834, remarks,—“five-sevenths of the sickness and mortality at Fort Gibson are produced by intemperance.” Dr. De Camp substantiates this statement. Dr. Joseph Bailey, now one of the surgeons at the post, affirms, that at least, seven, if not nine-tenths of the sickness and mortality have been caused by the same fearful vice.†

The mortality occasioned by shipwrecks has already been adverted to in a previous part of this section. “More than one thousand lives,” says a recent authority, “have been sacrificed in a short period, by the burning or explosion of boats and ships navigated by steam.” Most of these were the effects of intemperance. A most melancholy example of this kind is related in the memoirs of Sir Henry Blackwood. In 1807, His Majesty's ship Ajax, of 80 guns, when at the mouth of the Straits, took fire, and so rapid was the progress of the flames, that it baffled all the exertions of the crew. This fine ship was destroyed, and 300 of the best officers and men in the navy perished a miserable death. The fire originated in the bread-room, in consequence of the purser's steward and his mate being intoxicated. No human calculation can estimate the amount of mortality thus occasioned by intemperance.

The great amount of injury, however, to national health, arising from the use of intoxicating liquors, is not so much from those diseases which are obviously the result of *known excess*, as from those which originate in the practice of *moderate drinking*, but which are in general *attributed to other causes*. When the subject is fairly investigated, it will probably be found that a very large proportion of the disease which at present exists, arises from the *moderate* use of intoxicating liquors.

Mr. Beaumont remarks, “I have long been of opinion that many of the occult causes of disease, which from being undiscovered, so often baffle the profession in their treatment, are frequently dependent upon the subtle insidious influence of alcohol; and is there not some reason to believe that, to the potent influence of the same agency, may be attributed a considerable portion of sudden deaths, even when the individuals had never been addicted to an

* Parl. Evid. p. 82.

† Ibid. p. 181. ‡ Ibid. Appendix, p. 433.

* 4th Report Amer. Tem. Soc. 1831.

† Amer. Tem. Soc. Report, 1855. p. 47.

immoderate indulgence in intoxicating drinks."*

The influence of health on national welfare and prosperity renders this division of our inquiry a matter of paramount importance. Recent calculations and investigation, as we have seen, present an almost incredible amount of disease attributable, directly or indirectly, to the use of alcoholic stimulants. The removal of this source of human misery would therefore be attended with the happiest national results. Increased physical capabilities would ensure increased general prosperity; and human beings would be less subject to those precarious influences which so materially deduct from the gross amount of human happiness.

SECTION III.

ALCOHOL, ITS NATURE AND OPERATION ON THE HUMAN SYSTEM.

"The leprous distilment, whose effect
Holds such eumity with the blood of man,
That, swift as quicksilver, it courses through
The natural gates and alleys of the body,
And, with accursed poison, it doth infect
The wholesome blood."

SHAKSPEARE.

"The influence of a regulated and well balanced activity in the moral and intellectual faculties on the general health, compared with that of active and boisterous passions, is like the salutary effect of mild and wholesome nourishment, contrasted with the fiery potency of alcohol. The former is eminently conducive to life, health, and enjoyment, while the latter is as eminently opposed to them all."

DR. ANDREW COMBE.

- I. Definition of stimulants and their division into two classes, *natural* and *artificial*.—II. *Simple* and *diffusive* stimulants with their peculiar modes of operation and effects on the system.—III. Stimulants *not* nutritives.—IV. Alcohol a *poison*, both in its nature and operation.—V. Alcohol undecomposed or unchanged by assimilation.

I. STIMULANTS, or excitants have been defined to be "substances that augment powerfully the motions peculiar to the different organs of the body by a primary impulse on the sensibility and irritability of the part to which they are applied, communicated by the nerves to the whole system."†

In regard to their action on the system, stimulants may be divided into two classes, viz. *natural* and *artificial*. Thus, for instance, a proper proportion of nutritious and healthful food is a *natural* stimulant; it produces no other sensation throughout the system than that of pleasurable excitement, and, in a healthy person, it is not either

accompanied or followed by any injurious consequences. Light also is the natural stimulant of the eye, and sound of the ear. The action of these organs when thus stimulated, is precisely analogous to that of the stomach. These feelings are implanted in our nature by the Creator, and when properly exercised are in perfect harmony with the healthy operations of the whole system. *Artificial* stimulants, however, differ materially from the former class, inasmuch as they create an unnatural action on a part or parts of the system, and, in a state of health, do not in any degree assist the functions of nature, but on the contrary, essentially disturb them. When food, healthy and natural, both in quality and quantity, comes in contact with the coats of the stomach, it causes an additional flow of blood to its surface, which is evidenced by increased redness. The juices for complete digestion are also secreted, and necessary and important changes are effected. These changes, however, ought to take place without the exhibition of any functional disturbance or even *sensible* excitement. In this, is found to consist a fitness between the food applied, and the organ by which it has to be acted upon. When solid food or drink, however, is taken in such quantity as to produce a degree of *sensible excitement*, whether pleasurable or otherwise, dangerous consequences are likely to ensue. "The final result," remarks Dr. Johnson, "will be the same, irritability or morbid sensibility. If the excitement be pleasurable, as from wine, we are *spoiling* the stomach as we *spoil* a child by indulgence; we are *educating* the organ improperly, and laying the foundation for morbid irritability. On the other hand, if what we take into the stomach induce disagreeable sensations there, we are then offering a violence to the organ which will very soon terminate in disease, or more properly speaking, the natural excitability of the stomach is already changed into morbid sensibility, and disorder has actually commenced."*

The excitement which artificial stimulants create in the stomach, whether sensible or not, invariably produces such a change in that organ, as sooner or later terminates in a state of morbid irritability. The sensible or insensible operation which they may produce, entirely depends on the proportion in which they are taken. A small portion of pure alcohol for instance, which is one of the most powerful substances belonging to this class, will not only excite a burning sensation in the mouth, but a certain degree also of the same feeling in the stomach. The effect produced is purely irritation, and is evidenced by an increased flow of blood to the part affected, as well as an excited

* Essay on Alcoholic Drinks. p. 37.

† Materia Medica and Therapeutics. By Professor Thomson, p. 127.

* Essay on Indigestion, or Morbid Sensibility of the Stomach and Bowels. By James Johnson, M.D., p. 55.

state of the nervous system, by which it is supplied with energy and action. Apply a small portion of vinegar or some other irritating substance to the ball of the eye, and the result is precisely analogous,—an increased flow of blood to the part, a painful sensation or burning, and an *unnatural sensibility to light*: that is, a diseased or morbid condition which renders the eye incapable of receiving those impressions which, in a state of health, were agreeable and necessary. Precisely of such a character is the action of alcohol on the stomach. The part to which it is applied becomes unnaturally turgid and red,—a feeling of heat or burning is produced, and the gastric juice is secreted in a larger quantity than usual. A continued repetition of this injurious practice, produces a disordered state of the stomach, (analogous to the action of vinegar on the eye,) and this important organ is rendered *incapable of receiving on its surface that food which, in a healthy state, would not excite any unpleasant sensation*. Professor Oliver, thus judiciously dilates on this subject. “What should we think,” he remarks “of the prudence of frequently applying to a healthy eye, pepper, vinegar, camphorated spirit, or any other irritating fluid, which would affect it in the manner just described? Suppose the eye could be made the seat of a certain artificial appetite for such irritations, and could be gratified by the application of them, what language should we think would sufficiently express the folly or madness of that man who deliberately set about creating such an appetite in his eye, by the frequent application of these stimulants? Should we not expect, as a matter of course, that this tender organ, subjected to such unnatural excitement, would, at length, be thrown into a state of permanent irritation, which, in the form of inflammation, would in the end, disorganise and destroy it? This is precisely the character of that practice so prevalent among mankind, particularly the civilized portion of it, of swallowing a variety of irritating substances, solid and fluid, to stimulate the stomach. The inevitable effect of these, is to produce a state of irritation of the organ more or less permanent, according to the degree and frequency of the stimulation, which, in the form of chronic inflammation, gives rise to the most obstinate dyspepsies, and, in certain habits, leads to incurable and fatal disorganization of the stomach. The only difference between the two cases is, that the eye is not naturally the seat of any appetite, except for its proper stimulus *light*. But neither is the stomach *naturally* the seat of any appetite for stimulating substances. The artificial appetite which we can create in the one organ, is just as unnatural as that which, fortunately, we cannot create in the other. I say *fortunately*, because there can be no doubt that if any poison existed in nature, by which an

artificial appetite could be created in the eye for stimulating substances, the perverse ingenuity of man would long since have found it out, and it would be quite as common to meet people with inflamed, disorganized, and blind eyes, as it is now to see them, some with impaired, small, croaking, and snuffling voices, trembling hands, and dizzy heads, from the practice of stuffing a poisonous powder into the nostrils; and others tortured and groaning with the pangs of diseased and ruined stomachs, shattered nerves, and broken health, from the practice equally *rational* of loading their stomachs with a variety of stimulating substances. These are the effects of stimulants upon the parts to which they are applied. They increase and precipitate all the vital functions of the part, and they produce a condition of its nerves and blood vessels, very similar to that which exists in disease, that is, irritation of its nerves, and an increased quantity of blood in its vessels; a condition which, if frequently renewed, cannot fail of becoming permanent, and in the end, of producing disease.”

Stimulants, differ in their operation, in many respects from nutritious food. 1st. They interfere in particular, with the harmony of the digestive functions, which require no aid in the conversion of food into healthy nutriment, but what is afforded by the operation of the powerful solvents provided by nature, and the general health of the system. 2ndly. They enter into the system, and produce irritation and disturbance of the various parts, with which they come in contact: and 3rdly. Unlike nutritious food, they are incapable of being converted into healthy nourishment. These form the distinguishing characteristics between natural and artificial stimulants. They will require to be kept prominently in view in the present investigation.

II. Stimulants may be divided into two kinds, 1st, *Simple* stimulants, or those which affect or injure the part or parts only with which they immediately come in contact: 2ndly, *Diffusible* stimulants, which are not only local in their effects, but in their operation, extend at the same time over other parts of the system. Each of these classes require special consideration.

1. *Pure or simple stimulants*.—These are local in their effects. They irritate the parts with which they come in contact, and affect the other parts of the system, only by reason of the vital connexion which exists between the parts injured, and other perhaps distant organs. A strong stimulant, for instance, applied to the stomach, injures its functions, and consequently more or less interferes with its capability to carry on perfect digestion. Hence, other organic functions suffer *indirectly*, in part by reason of their being deprived of proper nourishment, and also because of the morbid

sympathies which are excited in that important organ.

2nd. *Diffusive stimulants*, also act injuriously on the parts with which they come in contact, but differ from the former class in their influence being extended over the whole system. If an individual swallows a small proportion of pure spirit on an empty stomach, a sensation of burning or irritation ensues. Other and more distant organs, however, shortly afterwards participate. The brain, in particular, exhibits marks of disorder, and a species of temporary delirium or mental excitement follows, in addition to general physical disturbance. All of these symptoms indicate some peculiar influence, by which diffusive stimulants expand and operate over the whole of the animal functions.

For these reasons it will easily be perceived, how incomparably more dangerous are the class of diffusive stimulants, than those designated as "simple stimulants." The latter exercise their injurious powers on a limited scale only; while the former possess the property of injuring one or more of the vital functions at the same time. The brain, for example, may be silently undergoing destructive changes, while, at the same period, the stomach and its functions may be so disordered as to hinder digestion and nutrition; and thus the two grand sources of life and energy suffer, either simultaneously or successively, from the same pernicious cause.

The brain in this case, of course, is affected through the medium of the nervous system, which is essential to life, and supplies all the functions through their respective organs with their vital energy, consequently, an injury done to the nervous system, necessarily extends its deleterious effects to all the operations of the system, and this in proportion to the susceptibility and energy of the different parts as regulated by their organic constitution.

The peculiar powers of the nervous system bear an important relation in regard to the present inquiry. In reference to diet, one of nature's sentinels consists in the *distinct sensation* which is experienced when the stomach is loaded with food, either improper in its quantity or injurious in its quality. The class of diffusive stimulants, however, when taken in moderate quantities, produce more or less injury, without exciting *conscious sensation* in the stomach. General exhilaration usually follows moderate vinous indulgence, but the stomach itself, when in a state of health, may or may not display conscious gratification or dislike. *In this consists the great danger of moderate drinking.* Individuals do not commonly *feel* any uneasy sensations consequent on moderate indulgence in wine. They cannot, therefore, for a moment, suspect the slightest possibility of injurious consequences arising from a cause, apparently so innocent and devoid of danger. Experience and extended obser-

vation, however, lead us to a contrary conclusion. The healthy relations of the system may, for some time, be almost imperceptibly undermined, and its harmonious operations disturbed, and not the slightest suspicion be entertained that these changes have originated in some injurious, though silent action on the digestive organs. "This circumstance," remarks Dr. Johnson, "leads us to divide into two great classes, those symptomatic or sympathetic affections of various organs in the body, dependent on a morbid condition of the stomach and bowels, viz., into that which is accompanied by *conscious sensation*, irritation, pain, or obviously disordered functions of the organs of digestion—and into that which is *not* accompanied by any *sensible* disorder of the said organs or their functions. Contrary to the general opinion, I venture to maintain, from very long and attentive observation of phenomena in others, as well as in my own person, that this *latter* class of human afflictions is infinitely more prevalent, more distressing, and more obstinate than the *former*. It is a class of disorders, the source, seat, and nature of which are, in nine cases out of ten, overlooked, and for very obvious reasons, because the morbid phenomena present themselves anywhere and everywhere, except in the spot where they have their origin."* Thousands, and tens of thousands of individuals are, in the present day, martyrs to indigestion, and, more or less, suffer from organic disorders of various kinds, altogether attributable to the moderate and habitual use of intoxicating liquors. In too many instances, attempts are made to remove these symptoms by an unfortunate application of the fatal, but unsuspected *cause*; until a series of morbid changes are effected, almost beyond the reach of remedial measures. Morbid changes of this kind, are frequently going on, until such a debilitated state of the system is produced, as on some critical occasion, suddenly terminates in an unexpected but fatal result.

Some interesting and invaluable experiments of Dr. Beaumont, of America, tend to throw considerable light on this subject. Dr. Beaumont had, under his care, an individual of the name of St. Martin, who had received a wound by which an opening was made in his stomach, which never closed, at least it had not, up to the year 1833, about nine years from its first occurrence. This opening was at one period two and a-half inches in circumference. In a short time, however, nature formed a kind of valve, which prevented an efflux of the food from within. By this means, Dr. Beaumont had an opportunity of examining, with the naked eye, the nature of those changes which take place in the stomach during digestion, as well as the injurious consequences which arise from improper indulgence. These ex-

* Essay on Indigestion. p. 8.

periments were made for a period of many months, in the most careful manner; and when St. Martin had completely recovered from the effects of his accident, and was in a state of *perfect health*. Dr. Beaumont examined the stomach of St. Martin, who was in general very temperate, after he had been indulging freely in the use of spirits for several days, and found its mucous membrane covered with *erythematic* (inflammatory) and *apthous*, (ulcerous) *patches*, the secretions in a vitiated state, and the gastric juice diminished in quantity, viscid, and unhealthy. *During all this time, Martin did not complain of any unpleasant or injurious symptom, not even of impaired appetite. Two days later, when the state of matter was aggravated, "the inner membrane of the stomach was unusually morbid, the erythematic appearance more extensive, the spots more livid than usual; from the surface of some of them, exuded small drops of grumous blood; the apthous patches were larger and more numerous, the mucous covering thicker than common, and the gastric secretions much more vitiated. The gastric fluids extracted were mixed with a large proportion of thick ropy mucous, and a considerable muco-purulent discharge slightly tinged with blood, resembling the discharge from the bowels, in some cases of dysentery. NOTWITHSTANDING THIS DISEASED APPEARANCE OF THE STOMACH, NO VERY ESSENTIAL ABERRATION OF ITS FUNCTIONS WAS MANIFESTED. St. Martin complained of no symptoms indicating any general derangement of the system, except an uneasy sensation and a tenderness of the pit of the stomach, and some vertigo, with dimness and yellowness of vision, on stooping down and rising again; had a thin yellowish-brown coat on his tongue, and his countenance was rather sallow, pulse uniform and regular, appetite good, rests quietly, and sleeps as usual."**

Such is the state of the stomach, in the present day, of thousands who are denominated *moderate drinkers*, and esteemed sober and temperate members of society. St. Martin, it must be recollected, was in his general habits, a *healthy and sober man*. What then must be the character of the morbid changes in the stomach which follow habitual indulgence in habits of intemperance.

Dr. Beaumont adds, that "improper indulgence in eating and drinking has been the most common precursor of these diseased conditions of the coats of the stomach. *The free use of ardent spirits, wines, beer, or any intoxicating liquor, when continued for some days, has invariably produced these morbid changes.*"†

III. The mode in which the stomach acts upon alcoholic stimulants, forms a subject not unworthy of investigation. Alcohol has been seen to be the basis of all intoxicating liquors, combined, of course, with more or less solid or extractive matter. The latter forms the only portion of these liquors which is capable of affording any nourishment. This, of course, is in proportion only to its nutritious properties, which are too trivial to deserve the slightest consideration. The liquid portion of these liquors, is more or less absorbed into the system, soon after it has entered into the stomach; while the solid matter which remains is acted upon by the digestive powers. These liquors possess no superior advantages over a solution of alcohol and water, except that in some of their forms, the peculiar combination which exists between the alcohol and other particles with which it is united, prevents, in some degree, that rapidity of operation which speedily induces intoxication. "If wine," says Mr. E. Johnson, "be productive of good, what is the nature and kind of that good. Does it nourish the body? It does not, for the life of no animal can be supported by it. Besides it is evident from the nature, manner, and mechanism of nutrition, that to be capable of nourishing, it must be susceptible of conversion into the solid matter of the body itself. But fluids are not capable of being transmitted into solids, but pass off by the kidneys as every body knows. If, indeed, the fluid contain solids suspended in it, then these solids can be assimilated to the body, and so nourish it, as in broths, barley-water, &c. But the fluid in which these solids were suspended must pass out of the body. If then wine contains some nourishment, it must depend on the solid particles suspended in it. Now if you evaporate a glass of wine on a shallow plate, whatever solid matter it contains will be left dry upon the plate, and this will amount to about as much as may be laid on the extreme point of a pen-knife blade, and a portion, by no means, all, of this solid matter, is capable of nourishing the body, a portion about equal to one-third of the flour in a single grain of wheat! If you really drink wine for the sake of the nutriment it affords, why not eat a grain of wheat instead of drinking a glass of wine, from which grain you would derive thrice as much nourishment? Why go this expensive, round about way, to obtain so minute a portion of nutritious matter, which you might so much more readily obtain by other means. Wine, therefore, has no power to nourish the body, or, in so minute a degree as to make it wholly unworthy of notice.* *Stimulants* are not, in the strict sense of the word, *nutritives*. The popular notion that stimulants are capable of adding to the strength of the human frame, has already been shown to be com-

* Beaumont's Experiments and Observations, &c. p. 257.

† Ibid. p. 259.

* Life, Health, and Disease. p. 268.

pletely fallacious. A principal cause of this, belief may be found in the erroneous ideas entertained relative to the terms *stimulation* and *strength*. A few words will suffice to explain the nature of animal stimulation. The body is endowed with certain actions and powers which are uniformly regulated by fixed and unerring laws, the inherent capacity of which will, of course, more or less, differ in all individuals. To propel or excite these actions beyond the natural velocity which they are capable of exercising, constitutes *stimulation*. Every unnatural excitation, however, of the animal powers is invariably followed by physical depression, corresponding with, and equal to, the unnatural exciting force which has been applied. Hence, it is evident, that *stimulation* does not impart *strength*; it simply *urges* and *forces* the animal powers to *increased velocity*, exactly as the application of the whip or the spur increases the speed of the horse. As the laws of the physical system are definite and fixed, a corresponding *diminution of capacity* is the necessary consequence of this extraordinary outlay of power, which is, in fact, a real *waste of animal strength*.

By this means the *vis naturæ*, or *natural power of resistance*, which enables the system to resist all noxious influences, is weakened in exact proportion to the amount of previous excitement. Wholesome food on the other hand stimulates the organs employed in restoration to agreeable and healthy action. The system thus acquires strength, the result, not of artificial excitement, but of attention to its natural requirements. Remember, said the late Mr. Abernethy, in his lectures, that wine is "*neither food, nor drink, but a stimulant.*" Sir Astley Cooper, not long before his death, made this observation, "*We have all been mistaken; we have called these drinks stomachics and tonics, when we should have called them stimulants.*"

If alcoholic liquors were suitable for human sustenance, we should most certainly have undeniable indications of their fitness or adaptation. In the case of wholesome food and drink *when taken in quantities proportioned to the wants of the system*, these indications are distinct and unerring. The action between food and the stomach, is harmonious and reciprocal,—the food acts on the stomach, and the stomach on the food, precisely in agreement with the designs of an all-wise Creator. Health and pleasure are the invariable results. The action, however, between the stomach and unnatural or poisonous agents,—arsenic, for example, is not only devoid of pleasure, but absolutely painful and destructive of its functions. The same results follow attention to, or infringement of, nature's laws in regard to other parts of the human system, as for example, the eyes—the lungs—or the blood vessels. The action of light on the eyes—air on the lungs—and blood on the blood

vessels—each excites the same reciprocal sensations of health and pleasure. Not so with regard to the action of alcohol; it does not produce any kind of pleasurable sensation. The stomach, the blood vessels, the nerves, the heart, the lungs, and the brain—all the organs of the human system with which it comes in contact in its unfriendly career, reject it in whatever form or combination, with natural and signal repugnance. So long as any portion of alcohol remains in the system, all those symptoms manifest themselves, which attend the presence of irritating and noxious ingredients. These only disappear when it is thrown off by those excretory organs, whose office it is to convey out of the blood all extraneous and unnecessary matter. The presence of alcohol in the blood is as repugnant to that vital fluid, as sand or pepper is to the eye, or some noxious gas to the lungs. It excites no congenial or healthy action, produces in fact no chemical or animal combination. These characteristics distinguish alcohol and other similar stimulants, from wholesome and nutritious food.

IV. *Alcohol*, both in its nature and operation, *ranks undoubtedly among the class of poisonous substances*. An *intoxicating* liquor in the strict etymological sense of the word, signifies a *poisonous* or *deleterious* liquor. The word intoxication is derived from the Greek *τοξικος*, *toxicos*, which signifies *poison* and *intoxication* consequently refers to a state of the system produced by some poisonous agent. The root of the word *τοξον*, *toxon*, signifies a *bow* for shooting, whence we have *τοξευμα*, an *arrow*, or missile weapon, *τοξεύω*, *toxeuo*, *to shoot with bow and arrows* and *τοξικος*, *toxicos*, *one who is expert in archery*. It was a common and early practice of the ancients, to dip the arrows which were used in war, in some deadly poison by which they were rendered more fatal in their effects. Hence the application of the word to analogous symptoms, produced by the use of intoxicating liquors.

Xenophon relates an interesting circumstance, illustrative of this subject, relative to Cyrus, which occurred during a visit, which the latter made, when a boy, to his maternal grandfather, Astyages. Cyrus was asked by his grandfather, why he did not swallow some of the wine? "Because truly," replied the youth, "I was afraid there had been poison mixed with the cup; for when you feasted your friends upon your birth-day, I plainly found the Sæcæan (slave) had poured you out all *poison*." "And how, child," replied Astyages, "did you know this?" "Truly," said Cyrus, "because I saw you all disordered in body and mind; for first, what you do not allow us boys to do, that you did yourselves; for you all bawled together, and could learn nothing of each other, then you fell to singing very ridiculously: and without attending to the

singer, you swore he sung admirably; then every one telling stories of his own strength, you rose and fell to dancing, but without all rule and measure, for you could not so much as keep yourself upright, then you all entirely forgot yourselves; you, that you were king, and they that you were their governor; and then for the first time, I discovered that you were celebrating a festival, where all were allowed to talk with equal liberty, for you never ceased talking.”*

These effects are precisely similar to those produced by many vegetable poisons known to the ancients, and used by them, not only for medical and other purposes, but as instruments of sensual indulgence.

Similar striking illustrations of powerful language being applied to the inebriating principle of alcoholic drinks, are not uncommon. Shakspeare exclaims, “O! thou invisible spirit of wine, if thou hast no name to be known by, let us call thee—*Devil*.” Assaad Yakoob Kayat, a distinguished native of Syria, informs us, as a curious coincidence, that the three letters G I N, with which, in England, we spell *gin*, form in Arabic, a word which signifies “devil.” The Indians denominate spirituous liquors “*fire-waters*,” and the Rev. Robert Hall, in our own day, used in relation to ardent spirit, these memorable but expressive words, “*liquid fire and distilled damnation*.”

Among the Indians the terms *drunkenness* and *madness* are identical. The word *ram-gam* in their language, signifies a *phrenetic* as well as a *drunkard*. These meanings are singularly expressive, inasmuch as *intoxication* and *madness* are in effect identical terms. The acts of a man in a state of intoxication, are the acts of one who labours under mental as well as bodily derangement.

Intoxicating liquors when taken in large, and consequently more powerful quantities, are peculiarly destructive to the vital energies, and produce either partial or entire paralysis of the animal functions.

“Think what happens to a man,” says Dr. Darwin, “who drinks a quart of wine or ale, if he has not been habituated to it. He loses both the use of his limbs and of his understanding; he becomes a temporary idiot, and has a temporary stroke of the palsy; and though he slowly recovers after some hours, it is reasonable to conclude that the perpetual repetition of so powerful a poison must at length permanently affect him. If a person accidentally becomes intoxicated by eating a few mushrooms of a peculiar kind, a general alarm is excited, and he is said to be poisoned, the emetics are resorted to; but so familiarized are we to intoxication from vinous spirit, that it occasions laughter rather than alarm.”†

The fact that *intoxicating* or *poisonous*

liquors when taken habitually, and for a considerable length of time, even in comparatively large quantities do not produce these effects, is not a conclusive argument of their innocuous nature. The same may be said of most other poisonous substances, such as tobacco or opium.

These well known poisons, like alcohol, when taken in small quantities, *exhilarate* or *stimulate*. In large doses they *poison* or *intoxicate*, and these effects are in proportion to the quantity taken. When the system becomes habituated to their use, these effects are produced only by larger doses which require to be increased from time to time. “*Small quantities of spirits*,” remarks Dr. Dods, “seldom produce effects which *the patient thinks to be hurtful*, but, *if repeated, they always prove more or less injurious*; larger quantities frequently prove fatal, by directly producing effects analogous to other poisons—very large doses often destroy life within a few hours, and are known to act on the same principle with other narcotics.”*

The phenomena of the more advanced stages of intoxication, are well described by Dr. Ogston. *Paleness of face, low and often stertorous breathing, languid and feeble circulation and pulse; delirium, convulsions, coma, and death*. These characteristics vary in proportion to the force of the exciting cause. Alcohol is universally acknowledged by medical men to be one of the most dangerous poisons, and is thus classified in all works on *toxicology*. Dr. Paris, in his new classification of poisons, places it among those substances by which the functions of the nervous system are destroyed, by means of suffocation from paralysis of the respiratory organs. This eminent physician classifies alcohol with oil of tobacco, both of which substances he denominates *narcotico-acrid poisons*. M. M. Foderé, and Orfila, place alcohol in the same class, in conjunction with nux vomica, woorara, cocculus indicus, poisonous mushrooms and other substances of like deleterious nature. “Spirits and poisons,” remarks, Sir Astley Cooper, “are synonymous terms.” Dr. Farre, on being shown a certificate, in which a number of respectable medical men class ardent spirits as a poison, remarked, “It is strictly so, in regard to the destruction of life.”† Haller includes spirituous drinks among those liquors which are poisonous, rather than useful.‡ Beddoes states, that the pernicious effects of spirits upon horses, have been accurately ascertained by the experiments of Pelger, and *proved to be as injurious as various other poisons tried at the same time*.||

“It would be difficult,” remarks Dr. Gordon, “to find a more destructive poison than ardent spirits.”§

* Parl. Evid., p. 221. † Ibid. p. 102.

‡ Physiol. vol. vi. p. 251.

|| Zoonomia, vol. ii. Essay, viii. p. 86.

§ Parl. Evid. p. 197.

* Xenophon, Cyropaedia, b. i.

† Zoonomia. Art. Drunken.

"The effects of alcohol," remarks Dr. Mussey, "whether immediate or remote, whenever they are so distinct as to be estimated, are always those of an unnatural, unhealthy, or poisonous agent; and soon after the daily poison is withdrawn, the vital powers, relieved from their oppression rally, the organs act with more freedom and regularity, and the whole machinery of life exhibits something like a renovation."*

"All writers," observes Dr. Charles A. Lee, "on *Materia Medica*, now rank alcohol among the most powerful and fatal of narcotic vegetable poisons." In all cases it acts as a powerfully irritant and caustic poison."†

In cases of death by lightning, the blood loses its power of coagulation, and remains altogether in a fluid state. It is witnessed also in cases of poisoning by tobacco, and other narcotico-acrid substances. This last sign of mortality, is observed in such cases as have proved fatal by the use of alcohol. The blood in the lungs, the heart, and the principal vessels, is found to be completely fluid in its nature, having lost its viscid and nutritious quality. It becomes consequently incapable of sustaining the animal functions of the system.

The following decisive experiment exhibits another remarkable effect of alcohol on the blood: "Mr. Brodie found that by the administration of a large dose of alcohol to a rabbit, the pupils of its eyes became dilated, its extremities convulsed, and the respiration laborious, and that this latter function was gradually performed at longer and longer intervals, until at length it entirely ceased. Two minutes after the apparent death of the animal, he opened the thorax (chest) and found the heart acting with moderate force and frequency, *circulating dark coloured blood*. The same phenomena resulted from the injection of two drops of the essential oil of bitter almonds, (whose active principle is prussic acid) diffused in half an ounce of water, into the bowels of a cat."‡

Prussic acid and alcohol are thus found to be similar in their effects. They prevent the blood from undergoing that necessary change of vitality, *the conversion of black blood into crimson*, in the latter of which states, it is alone capable of supporting healthy existence.

Alcohol, even in small quantities, is destructive of human life. Its influence on the animal powers has been accurately tested by numerous and conclusive experiments. When taken into the stomach, applied to the nostrils, or even rubbed upon the human skin, it stimulates the living fibre, or in other words, augments the sensibility of the part to which it is applied. In larger quantities its effects on the stomach are those of all

powerful irritants,—a sense of burning and pain. The vitality of plants is rapidly destroyed on contact with alcohol. Leeches, when immersed in it, die in two or three minutes, and their bodies are shrivelled and contracted. A very small quantity inserted under the skin of a frog, or injected into its stomach, destroys life in a few moments. Applied to one of the crural nerves of the same reptile, it destroys instantaneously the motion of that leg, and diminishes the contractions of the heart. A small portion of this noxious fluid injected beneath the skin, or into the stomach of turtles, renders them in a brief space of time, motionless, and soon after extinguishes life. On the addition of a little spirit to water in which there are fishes, its poisonous effects soon become manifest. The fishes make a few spasmodic leaps, and, afterwards, incapable of retaining their proper position in the water, float on their sides or back to the surface. A variety of similar and more extended experiments have been made by Orfila, Magendie, Brodie, and others, on rabbits, guinea-pigs, cats, dogs, and horses, all of which demonstrate the poisonous and destructive influence of alcohol.

V. *Alcohol, then, in two ways, produces its deleterious effects on the animal economy.* 1st, By *local irritation*, or the paralyzing influence which it produces on the nerves of those parts with which it primarily comes in contact; and 2ndly, By *the effects which it produces on the blood or organs with which it comes in contact*, after it has been carried into the system by means of *absorption*.

The theory of the *absorption of alcohol unchanged or undecomposed, by the process of assimilation*, is one of considerable importance, and pregnant with interesting facts. Recent investigations have tended much to elucidate this subject.

The impression on the nervous system is first received by the nerves of the stomach, from thence sympathetically conveyed to the *cerebro-spinal centres*, and in this manner, throughout the whole system. An experiment made by Rayer, corroborates this theory of nervous communication. He injected a small portion of alcohol on the peritoneum of a rabbit, (the highly sensitive and lining membrane of the bowels) which extinguished life in less than a minute. This can scarcely be supposed to have arisen from absorption, the time being too limited to have admitted of such an action.

Dr. Beaumont, among other results which he arrived at, from his experiments on St. Martin, found "that *water, ardent spirits*, and most other *fluids*, are not affected by the gastric juice, but pass off from the stomach soon after they have been received.

Magendie, the celebrated French physiologist, made an experiment, to determine this fact, upon a dog. After tying up the outlet of its stomach, he injected into that organ a portion of alcohol, and in half an hour

* Mussey's Prize Essay on Temperance.

† Bacchus. American Ed. p. 322.

‡ Paris' Pharmacologia, vol. i, p. 224. Sixth Edition.

afterwards, he found a powerful odour of this fluid in the blood, in addition to which he obtained some of it by means of distilling a portion of the same substance. The experiments of M. Sigelas are equally conclusive. He found that diluted alcohol injected into the bronchial tubes or veins, or applied upon serous membranes produced intoxication as speedily as when taken into the stomach, and that this effect was retarded or accelerated by those circumstances which, in general, retard or quicken absorption.* Tiedemann and Gmelin also recognized alcohol by its odour in the blood of the splenic vein, although they were unable to detect it in the chyle.

According to Mr. Hare, it is not difficult to conceive that *intoxication depends on an actual transfer of volatile spirit from the stomach to the brain*, and that errors of perception and general derangement of the sensorium, usually exhibited under the influence of strong liquors, are produced by the direct agency of such diffusible matter on the substance of the brain and its particular nerves.†

Several circumstances combine to show that the brain is not acted upon by means of nervous sympathy only, but that the deleterious poison is conveyed to that organ directly through the medium of the circulation of the blood. Dr. Ogston is of opinion, that this fact is proved by the speedy reaction of alcohol on the kidneys, and its presence in the breath even after its entire removal from the stomach. A strong odour of spirits has been observed in the breath, when none could be detected in the stomach, by careful examination of its contents after removal.

A great variety of articles pass into the circulation, by means of lacteal absorption, or direct imbibition from the coats of the stomach, from whence they have immediate access to the blood. The comparative rapidity of this operation varies in the different articles submitted to experiment.

Mr. Hare relates the following case, by way of illustration: A healthy, labouring man, about thirty years of age, engaged, "to drink an entire quart of gin for a wager." Having at a single effort accomplished this foolish feat, he fell down within a quarter of an hour in a state of intoxication. In this state he was conveyed to Westminster Hospital, where he died in less than three hours, and, on the following morning, underwent a *post mortem* examination. "The substance of the brain," remarks Mr. Hare, "had the most healthy appearance imaginable. On arriving at the ventricles, however, a strong smell of gin was emitted; and they contained a preternatural, though not very large, quantity of fluid, which had powerfully the same smell. Our next object of examination

was the stomach, and this was found to contain a considerable quantity of undiluted gin.*

Dr. Ogston relates a similar circumstance, which came under his own observation. "The body of a woman, aged forty, who was believed to have drowned herself in a state of intoxication, was found, on the 23rd of August, 1831, in the Aberdeenshire canal. In company with another medical man, I was requested to inspect the body, in order to report the cause of death, none having witnessed the act. In addition to the usual appearance in drowned persons, we discovered nearly four ounces of fluid in the ventricles, having all the physical qualities of alcohol, as proved by the united testimony of two other medical men, who saw the body opened, and examined the fluid. The stomach also smelt of this fluid."†

Dr. Kirk, of Greenock, Scotland, relates the following additional case: "I dissected a man," says he, "who died in a state of intoxication, after a debauch. The operation was performed a few hours after death. In two of the cavities of the brain, the lateral ventricles, was found the usual quantity of limpid fluid—when we smelled it, the odour of the whiskey was distinctly visible; and when we applied the candle to a portion in a spoon, it actually burned blue; the lambent blue flame, characteristic of the poison, playing on the surface of the spoon for some seconds."‡

Dr. S. Akerly, of America, states that he once bled a man, who was afterwards ascertained to be a great drunkard, whose blood smelled strong of spirit, and when agitated in the vessel, the fumes of rum arose as if from the pure liquor. Frequent fits were the consequence of this man's intemperance.

A post mortem examination of a man who died of long continued intoxication from immoderate drinking, was made by Dr. Wolff, who found that the surface, and still more the ventricles of the brain had a strong smell of brandy, although the contents of the stomach had not.||

Dr. Percy has recently published a thesis on this subject, the result of most careful investigation, for which a gold medal was awarded by the medical faculty of the University of Edinburgh. It is deserving of serious attention, not only on account of the important conclusions deduced from his experiments, but the accurate manner in which his investigations were conducted. It is entitled, "*An Experimental Inquiry concerning the presence of Alcohol in the Ventricles of the Brain, after poisoning by that liquid, together with Experiments, illustrative of the Physiological action of*

* Hare on the Stomach and Alimentary Organs, pp. 169, 170.

† Dr. Ogston on Intoxication, Edinburgh Med. and Surg. Journal, vol. xl, 1833, p. 293.

‡ Address to the Leven Temp. Society, p. 6.

|| Christison on Poisons, 3rd Edit. p. 853.

* Revue Med. tome ix. p. 476

† Hare on the Stomach and Alimentary Organs, p. 169. Edition, 1821.

Alcohol." The British and Foreign Medical Review, in reference to this work, remarks, "There is no doubt of the correctness of Dr. Percy's tests, nor any appearance of fallacy in his experiments, or the conclusions which he draws from them."

These experiments were principally made on dogs, and were most conclusive in their results. They strongly corroborate the cases just related. In one case in which alcohol was injected into the stomach of a dog, by means of an elastic catheter, the following was the result of a "chemical examination" made immediately after death, which took place in about an hour and a half. "The brain and the blood from the jugular vein, the urine, the bile, and the contents of the stomach, were severally subjected to analysis; and in every instance an appreciable quantity of alcohol was obtained, as proved both by the test of dissolving camphor, and that of inflammability."*

In another similar case the head was opened in about three quarters of an hour after death. "A decided smell of alcohol was immediately perceived;" and in the evening when the brain was subjected to distillation, "a sensible quantity of alcohol was obtained in the usual manner." A considerable portion of the liver was subjected to the same process, and "a supernatant stratum of alcohol half an inch in depth was obtained."†

In a third case in which alcohol had been injected into the jugular vein of a small terrier, "A strong and unequivocal smell of alcohol was perceived in the cavity of the chest," which was examined in less than five minutes after death. On the following day the head was examined, when "a decided smell of alcohol was instantly perceived; and the brain yielded on analysis a very sensible quantity of alcohol."‡

In a fourth case in which half an ounce of alcohol was injected into the left carotid artery of a full grown spaniel, "the contents of the cranium, even *before* the dura-mater was detached, emitted a strong and unequivocal smell of alcohol." The brain on chemical examination, "furnished a stratum of alcohol, half an inch in depth."||

The following experiment was made "to determine the rapidity with which alcohol, when introduced into the stomach, is transferred to the brain." To this end Dr. Percy proposed to administer a dose of alcohol, and at the expiration of a few minutes, to destroy life by prussic acid; but says he, as will appear, "it was not found necessary to resort to the last mentioned poison."

"At 3h. 54m. p. m., with the assistance of my friend, Mr. Wright, I injected 2 oz. and 3 dr. of alcohol, sp. gr. 850, into the stomach of a full-grown spaniel bitch. There

was little struggling during the passage of the instrument; but scarcely was the injection completed, when the animal uttered a loud, plaintive cry, and, being dropped by Mr. Wright, fell lifeless to the ground. Not a gasp was afterwards taken, nor, after the lapse of one or two minutes, could a single pulsation of the heart be felt: the function of respiration and the action of the heart, remarkable to say, were suddenly and almost simultaneously arrested. Yellowish fæces were evacuated, and the pupils appeared to be dilated to the greatest possible extent. *Never did I see every spark of vitality more effectually and more instantaneously extinguished!* I proceeded, as soon as possible, to remove the brain; which, in order to save time, was effected by splitting the head longitudinally, on a line with the longitudinal sinus. At 10 minutes past 4 precisely, the brain was extracted, instantly cut into slices, and introduced into a matrass. The usual precautions being observed, distillation was immediately performed, and the process concluded. I obtained a supernatant stratum, not less than one-third of an inch in depth, which burned with a blue flame, and dissolved camphor. The blood, also, procured from the different cavities of the heart and great veins of the chest, furnished, on analysis, a stratum of alcohol half an inch deep. On opening the chest, a decidedly alcoholic smell was perceived, as evidenced by Mr. Wright, my brother, (who was ignorant of the experiment,) and myself. The brain, also, was thought to emit a somewhat spirituous odour.

"Now, it may be observed, that not only must *alcohol have been conveyed from the stomach to the brain, in the course of one or two minutes after the injection*, for at this period the heart's action ceased; but that *a considerable quantity, also, must have passed into the current of the circulation*, for the actual amount of alcohol yielded by the brain in this instance, equalled, if not exceeded, what I have in general obtained when the poison has been allowed much longer time for absorption. Besides, the blood furnished an abundant quantity of alcohol."*

It is essential to remark, that for one or two days previous to death, the animal received but a very scanty supply of nutriment; so that the condition of the stomach and intestinal canal was extremely favourable for rapid absorption. The amount of alcohol administered in this case, and which destroyed life with such fearful rapidity, was not quite equal in quantity to that contained in a third of a pint of port wine, certainly not an uncommon allowance to those who are accustomed to take wine, after the chief repast of the day.

In some of these experiments, the sub-

* Experimental Inquiry, &c. By John Percy, M.D., President of the Royal Medical Society of Edinburgh, &c., p. 23, 1839.

† Ibid. p. 31. ‡ Ibid. p. 79. || Ibid. p. 89.

* Experimental Inquiry, &c., p. 59.

stance of the brain was cut into slices, and then submitted to chemical analysis. Dr. Perey remarks, "These experiments are curious, as they show with what pertinacity, even a liquid like alcohol, which evaporates with great facility, may *adhere to, or be, as it were, combined with organic membranes.*"*

The following analysis, by Dr. Perey, of a portion of the brain of a man who killed himself by an excessive dose of rum, substantiates the previous experiments.

"Mr. C., æt. 24, was a person of very eccentric character, but [ordinarily] of temperate habits: so much so that, during the period of ten months which he had passed in the same lodging, he had only once been seen under the influence of wine. On the evening of the 8th of April, 1838, he returned to his lodging, about 11 o'clock, in a state of perfect sobriety; and having finished his supper, which consisted of cheese, and three-quarters of a bottle of ale, he retired to his bed-room, giving the usual instructions to his landlady, not to disturb him the next day (Sunday,) which he always passed in bed. In the afternoon, they knocked at his room door, but as he did not answer, they thought he was asleep. In the evening they again knocked, but still no answer was given; and next morning, becoming alarmed, they forced the door, when they found him lying dead on the floor, with his night shirt on, although he had evidently never been in bed. The body was examined on the Tuesday morning. The attitude in which he was found was an easy one. The limbs were extremely rigid, and required much force to flex them. The skin of the thighs was much puckered (*cutis anserina*.) The feet and hands were livid.

"*Chest.*—The lungs were healthy, but gorged posteriorly with dark-coloured blood. The heart was natural in size; but the right ventricle and auricle, with the vena cava ascendens and descendens, were much distended with dark coloured fluid blood. The left side and aorta were perfectly empty.

"*Abdomen.*—The stomach contained about 5 oz. of darkish fluid, which smelt strongly of rum, or rum and sugar. Its lining membrane was natural in colour, except near the cardiac orifice, where it was somewhat injected.

"*Head.*—The vessels on the surface of the brain were *unusually gorged with dark fluid blood*. The brain generally *smelt strongly of the contents of the stomach, [rum.]* On the table, in his bed-room, was a bottle containing about a tea-spoonful of rum. This, the landlady knew was full late on Saturday night. So that it was certain he had drunk it all, and probably by *putting the bottle to his mouth*, as there was no glass in the room." "On obtaining a portion of the brain, I thought I could

distinctly recognize the peculiar odour of rum. In the afternoon of the same day, I subjected part of the brain to analysis, in the usual manner. Every possible precaution was observed. I distilled over about two-thirds of a drachm. On agitation with subcarbonate of potass, in a small test tube, a supernatant stratum, one-fourth of an inch in depth, instantly appeared, and was separated from the subjacent solution, by some flocculent matter. The liquid composing this stratum, colourless and very mobile, instantly *dissolved camphor, and burned with a blue flame.*"* Dr. Christison, Professor of Materia Medica in the University of Edinburgh, examined the remaining portion of the brain, with a similar result.

Among other important conclusions which Dr. Perey was authorized to draw from his experiments, were these:—

1. That the circumstances of alcohol being separated from the brains of the dogs, and the human brain, corroborate the cases related by Dr. Ogston and others; and that to a certain extent, alcohol is diffused through the substance of the brain, and that it is not all contained in the cerebral vessels. "Although," says he, "I have subjected to analysis, a much greater quantity of blood than can possibly be present within the cranium, yet I have, in general, been enabled to procure a much larger proportion of alcohol from the brain, than all this quantity of blood. *Indeed, it would almost seem that a kind of affinity existed between alcohol and the cerebral matter,*" [that is the matter of which the brain is composed.]

2nd. The remarkable rapidity with which alcohol may, under *favourable circumstances*, be absorbed from the stomach, and conveyed to the brain; and

3rd. That alcohol may be detected in the *blood, the urine, the bile, and the liver*. It may with great facility be separated from the bile and liver, "and," remarks Dr. Perey, "this circumstance may probably serve to explain the frequency of hepatic disease in habitual drunkards."†

The observations of a standard Medical Journal on this subject, are too important to be omitted in this place.—"Spirit has no share in that assimilation with the blood, which other articles of diet possess; since it has been declared by high authority, that 'spirit, is not in any quantity, miscible with the blood, and is not capable of assimilation with its elements.' When introduced into the current of the circulation, it is a body altogether foreign, acts in all respects like a poisonous agent, however feeble; and the effects which it appears to produce in the way of stimulation or excitement, are manifestly due to its retarding the motion of the blood in the capillaries, and producing there temporary stagnation and congestion. It is

* Experimental Inquiry, &c., p. 29.

* Experimental Inquiry, &c., p. 46.

† Ibid. p. 104.

a foreign body, which excites the blood and tissues to reaction, in order to resist its presence and introduction, and the reaction continues so long as it is present."*

Dr. Trotter, well remarks, that human blood and healthful chyle, do not acknowledge alcohol to be an ingredient in their composition.†

The presence of alcohol in the system is at all times repulsive to its healthy operations. Every part of the human frame with which it comes in contact, rejects it with significant marks of alarm, and vital efforts are made to get rid of its noxious influence. Under the excitement of alcoholic stimulus, the vessels of the brain receive an additional and unnecessary quantity of blood. It is at this period, that these vessels relieve themselves from their tortured and distended condition by the effusion of serum, (or the watery particles of the blood,) on the surface, and in the ventricles of that organ. *Coma* and death speedily follow the deposit of alcohol in these vital regions. The same process takes place also in other organs of the body. The functions of the brain and nervous system, however, take precedence of all others in importance, inasmuch as they are essentially necessary to the vitality and healthy operation of all the other functions. The lungs also, and the kidneys make strenuous efforts to relieve themselves of the injurious load. This circumstance is proved, in the one instance, by the breath of the drunkard, which, in cases of free drinking, exhales, from time to time, a spirituous odour; and in the other, by the excited action which is produced, and the copious evacuations which follow undue indulgence. The theory of death by intoxication may be thus explained. Effusion of matter into the ventricles of the brain, renders that organ incapable of efficiently performing its functions. The other functions of the system are, by this means, essentially injured. The muscles of respiration are among the first of those which suffer. Respiration is not conducted with adequate effect. Dark blood is retarded in the pulmonary vessels, and when it does reach its destination, returns *still in the same state*, not having undergone its usual and essential vital changes. When this unchanged blood reaches the brain, it soon extinguishes every remaining portion of its vitality. Loss of life is the speedy and inevitable result.

Loss of temperature is indicated by paleness of the face, and coldness of the extremities. It is accounted for on the principle, that the changes which the blood undergoes in a healthy state of the lungs, are essentially necessary to animal temperature, and therefore every cause which retards this operation, must diminish the temperature of the system, as it paralyzes its vital energies.

A careful consideration of these statements leads us to the conclusion, that alcohol, in all its combinations, is a *positive and effectual poison*. In its composition and effects, it is incapable of promoting in any way healthy existence, and to persons in a state of health, it is, under all circumstances, both unnecessary and pernicious. The moderate proportion in which it may be taken, does not do away with its injurious consequences. They are only less so in degree, and in reality are, *in the end*, more destructive, because less observed, and less guarded against. It may, in conclusion, be affirmed, that there exists no safeguard against the evils of alcoholic stimulants, but in the total and permanent abandonment of their use, in all their varied and seducing combinations.

SECTION IV.

GENERAL EFFECTS OF INTEMPERANCE ON THE HUMAN SYSTEM.

"Providence has gifted man with reason; to his reason, therefore, is left the choice of his food and drink, and not to instinct, as among the lower animals. It thus becomes his duty to apply his reason to the regulation of his diet, to shun excess in quantity, and what is noxious in quality, to adhere in short to the simple and the natural: among which the bounty of his Maker has afforded him an ample selection; and beyond which, if he deviates, sooner or later he will suffer the penalty."

PROUT.

"——— In our world, death deposes
Intemperance to do the work of age,
And, hanging up the quiver nature gave him,
As slow of execution, for dispatch
Sends forth licensed butchers; bids them slay
Their sheep (the silly sheep they fleeced before,)
And toss him twice ten thousand at a meal.
O what heaps of slain
Cry out for vengeance on us."

YOUNG.

"Not one man in a thousand dies a natural death, and most diseases have their rise from intemperance."

LORD BACON.

I. The animal frame constructed with a view to perfection or health.—II. Intemperance destroys the healthy relations of the system.—III. It diminishes and destroys the vital power, and prevents the organs of restoration from performing their appropriate functions.—IV. It acts as a powerful excitant of fever, cholera, and other diseases.—V. Long-lived drunkards' exceptions to a general rule.—VI. The effects of alcoholic liquors on diseases which already exist, as well as on the curative means adopted by medical men.—VII. Effects of intemperance on the physical powers.—VIII. Intemperance entails upon posterity physical debility and disease.

I. An examination of human physiology necessarily leads us to the following conclusions:—

1st. The human system has been constructed with a view to perfection. All its operations are intended to harmonize with each other, and to produce that state which is denominated health.

* Ed. Med. and Surg. Journ., July, 1839, p. 180.

† Essay on Drunkenness, p. 170.

2ndly. This perfection, or health, depends on the proper performance of all the physical functions, which can be secured only by a careful investigation and observance of the laws of nature; and

3rdly. Every deviation from health arises from some irregular organic action or infringement of the laws in question; for which mankind are alone responsible both to their own nature, and its Divine Author; and they must suffer the unavoidable penalties consequent on improper indulgence.

This interesting investigation also leads us to the conclusion that the Creator has bestowed upon man a sufficient guide for his direction in the choice of his food, and in the regulation of his physical powers,

1st. By the constitution of his system, and,

2ndly. By the effects which invariably follow unlawful indulgence.

In the present chapter it is intended to consider some of the more prominent effects of intemperance, and, in particular, such as arise from the use of alcoholic liquors.

II. *Intemperance destroys the healthy relations of the system.* The object of food is to supply the system with nutriment; in other words, to restore the waste of matter to which the human frame is, under all circumstances, liable. Want of food depresses or exhausts the animal powers. A judicious supply of nutriment produces invigoration and strength. An harmonious balance of the animal powers constitutes health. Health, in a great measure, depends on a proper supply of food. In this we are principally regulated by a feeling called *appetite*, a term which is used simply to express *the present requirements of the system*. Hunger and *thirst* are sensations common to all. In the gratification of these feelings it is of the highest importance that the human system be free from all false and unnatural impressions. Nature, however, instructed by the wisdom of her Divine Author, has provided against this danger. Solid food has been furnished us in grateful variety. Liquid food, as a necessary diluent of the former, has been given to us in one variety only. Water is the grand liquid of nature, and is universally acknowledged to be best fitted to relieve the system of that state of which thirst is the admonitory symptom. No other liquid is necessary for the health of man. In proportion as we abandon the use of this admirable gift of creation, and resort to artificial compounds, do we depart from the obvious dictates of nature, and increase the probability of injurious consequences.

It is dangerous to admit articles into dietetic use which are not distinctly beneficial in restoring the natural waste of the system, and therefore cannot be denominated otherwise than articles of luxury. Alcohol, tobacco, and substances of a similar nature, in common use, do not come under the denomination of nutritive substances. They produce more

or less physical excitement, but do not add to the bulk or strength of the system, or bestow permanent vigor and refreshment.

"The great evil," remarks Dr. Oliver, "of drinking wine or other diffusible stimulants, particularly to the young, is not so much in its immediate effects on health, as in the danger of creating an artificial thirst for wine or other stimulants; that is, a thirst which is not expressive of any real want of the constitution, but on the contrary, is the most decisive proof that the want does not exist."

Let every young man then beware that he does not acquire a love for wine; for if he should, he may be assured that his constitution has received a wound, which in its consequences may be fatal. It is true, that his health may not have sensibly suffered; but *the healthy relations of his system have been deranged*, and the harmony between its desires and its wants (one of the most infallible signs of a sound constitution) destroyed; and as in a great majority of cases, mankind will listen to the urgent language of their feelings, rather than to abstract considerations, in what concerns their animal wants, a foundation is laid in the loss of this natural relation for the ruin of thousands. Scarcely any more fruitful source of ruin exists among the human race, than the loss of the correspondence and harmony established by nature between the wants and the real necessities of the system, and its feelings and language.*

III. *Intemperance diminishes and finally destroys the vital power; that property possessed by the human frame which may be denominated the self-preserving power of nature.* The vital power is that mysterious influence which pervades all living matter, imparting life, vigor, and animation in addition to the power of sustaining existence for a limited period. It sustains man through extraordinary physical exertion, and endows his constitution with the power to resist, to a certain extent, the effects of excessive heat or cold, labour and fatigue.

Man is peculiarly subject to the vicissitudes of climate and of seasons. Business or pleasure may direct him to countries, the climates of which are either in the extremes of heat or cold. In his own or foreign lands he may be exposed to sudden impressions arising from the changes of the seasons. All of these vicissitudes the vital power enables him to sustain with comparative impunity, *provided he has not exhausted its influence by intemperate habits*. The same power, in a healthy condition, preserves him from the injurious influence of *Marsh Miasma*, or poisonous vegetable exhalations, and other noxious effluvia, to the dangers of which most persons are more or less subject.

* Dr. Oliver, Professor of the Theory and Practice of Medicine, Dartmouth College, America.

The vital power is the same in all human beings; modified, it is true, by peculiar circumstances. It is possessed by the native of the torrid, as well as the frigid and temperate zones, and sustains him in all the physical exertions to which he is liable. The *tenacity* of this principle of nature displays itself in the wonderful exertions of travellers. The Arab, with a very small proportion of sustenance, traverses scorching deserts for hundreds and even thousands of miles; the soldier in the midst of the most trying physical circumstances endures long and enervating marches. A slight proportion of food, a few hours rest, and the body is invigorated, and again capable of encountering labours of an astonishing character. Such is the sustaining and life-preserving influence of the vital power. How important then that mankind should minutely ascertain those circumstances which contribute to enervate and destroy this active principle.

It may be observed that the vital power can only be secured in a healthy state by the regular and harmonious action of all the functions of the system. It is subject to, and a consequence of, a due performance of the organic laws. Proper food, air, exercise, and rest are essential to its continuance. Every circumstance therefore which tends to derange or enfeeble the animal functions, diminishes, in a greater or less degree, the force of the vital power. Many circumstances contribute to this result, but none have so great a tendency to decrease the vitality of the system as that of intemperance. Intoxicating liquors, for a time, increase the excitability of the vital power. This effect, however, is quickly succeeded by languor and exhaustion. Intemperance thus shortens the duration of human life. Each act of indulgence decreases the energy and strength of the vital power, until at last, the unhappy victim of strong drink falls an unavoidable and premature victim to his unnatural career.

To obtain a more familiar notion of the nature of the vital principle, it may be interesting, by way of illustration, to compare the human frame to a machine of limited powers; in other words, one which by previous experiment, is calculated to undergo, for a limited period, a certain degree of labour. Produce more labour from this machine than it is calculated to perform, and in the same proportion will be the limit of its duration. There is an exact analogy in this case with respect to the human frame. The Creator has given to our physical constitution vital power sufficient for all natural purposes. If, by intemperance, of whatever character, or arising from whatever source, we excite irregular action in the system, the human machine becomes proportionably debilitated in its power, and limited in its duration. These general remarks will enable the reader to understand why it has been asserted that the length of a man's life may

be estimated by the pulsations he has strength to perform. An ingenious author, from this circumstance makes the following calculations:—If we allow seventy years for the usual age of man, and sixty pulsations in a minute for the common measure of pulses of a temperate person, the number of pulsations in his whole life, would amount to 2,207,520,000. If, by intemperance, he force his blood into a more rapid motion, so as to give seventy-five pulses in a minute, the same number of pulses would be completed in fifty-six years. His life by this means, would be reduced fourteen years. The celebrated physician, Dr. Hufeland, appears to lay much stress on the circulation with respect to longevity. He remarks that “*a slow uniform pulse is a strong sign of long life and a great means to promote it;*” and again. “*A principal cause of our internal consumption, or spontaneous wasting, lies in the continual circulation of the blood. He who has a hundred pulsations in a minute may be wasted far more quickly than he who has only fifty. Those, therefore, whose pulse is always quick, and in whom every trifling agitation of the mind, or every additional drop of wine, increases the motion of the heart, are unfortunate candidates for longevity, since their whole life is a continual fever.*”*

Intemperance acts injuriously on the human system in *preventing the organs of restoration from performing their functions in a healthy manner*. The organs which have for their object the reparation of waste, are among the most important of those which compose the human frame. Thousands of atoms of *waste* are being continually separated from the body, whilst their place is taken up with new and more appropriate matter. Lavoiser, the celebrated French chemist, states, that the skin alone, during every twenty-four hours, parts with twenty ounces of useless matter. To this important source of waste may be added that of the alimentary canal and various organs of excretion, not omitting also the impure air which is continually being emitted from the lungs. This large separation of useless matter indicates the necessity of a continual supply of fresh nutriment. The system otherwise would be liable to premature dissolution or decay. To effect this restoration, the organs of *reparation* must be in a healthy condition. Derangement of the digestive functions in particular, is inimical to healthy restoration. The lungs, the heart, the liver, &c., have each their separate functions, and contribute their appropriate share towards restoring the waste of the system. Derangement then of any, or all, of these functions, is more or less injurious to health, by preventing those processes which are essential to its continuance.

Intemperance, in two ways, injures the

* Hufeland on Long Life, &c.

human system in respect to the subject under consideration.

1st. *In preventing the effectual separation of old and useless matter*, and 2nd. *In the new matter not being possessed of the healthy nature essential to proper restoration.* In the one case, the system becomes loaded with matter *not possessing vitality*, which consequently *diminishes from its self-preserving powers*; in the other, particles of *crude or imperfect matter* are lodged in the system, and are injurious in their consequences, in proportion to their unfitness to supply nutrition.

The loss of vital energy, or power, forms a great source of disease and mortality. Those who have been accustomed to live freely, invariably fall an easy prey to the attacks of disease. With such persons the slightest injury is attended with the most serious results. The vital functions are unable to perform their accustomed labours, and consequently the *vis naturæ* is incapable of resisting the effects either of internal or external injuries. Thus the slightest cold, or comparatively trifling physical injury, is in general, attended with danger, and often with loss of life. In some inebriate cases, the principle of vitality is so small, that it is suddenly extinguished by little more than ordinary exertion, or exposure to unusual heat or cold; and even, as is not unfrequently the case, *by simple indulgence in a glass of cold water.*

The substance of the following remarks not very long ago, went the round of the public papers.—Medical men of experience in the metropolis are familiar with the fact, that confirmed beer drinkers in London can scarcely scratch their fingers without risk of their lives. A copious London beer drinker is all one vital part. He wears his heart upon his sleeve, bare to a death-wound, even from a rusty nail or the claw of a cat. The worst patients brought into the metropolitan hospitals, are those apparently fine models of health, strength, and soundness, the London draymen. It appears that when one of these receives a serious injury, it is always necessary to amputate, in order to give the patient the most distant chance of life. The draymen have the unlimited privilege of the brewer's cellar. Sir Astley Cooper, on one occasion, was called to a drayman, a powerful, fresh-coloured, healthy looking man, who had suffered an injury in his finger from a small splinter of a stave. Suppuration had taken place in the wound, which appeared but of a trifling description. This distinguished surgeon, as usual, opened the small abscess with his lancet. Upon retiring, however, he ascertained that he had forgotten his lancet case. Returning to recover it, he found his patient in a dying state. In a few minutes, or at most, in a few hours, the unfortunate man was a corpse. Every medical man in London, concludes the writer of this statement, above all things,

dreads a beer-drinker for his patient in a surgical case.

In another popular publication, a remarkable instance of this kind is recorded, in confirmation of the above case. "Some forty years ago, there flourished in London a drayman of huge proportions, a regular beer bibber, known by the name of Big Ben. Ben was reckoned one of the strongest men within the bills of mortality, and he was occasionally seen showing off as second in those prize boxing matches which used to delight our moral and intelligent ancestors. When stripped of his upper garments, and engaged in the attitudes of this brutalizing sport, seldom or never had there been exhibited a frame so robust, or one which promised better to endure the shocks which might assail it. "There stands," you would have said, "an invulnerable giant—death will certainly find it no easy matter to level him." Yet for all this apparent hearty strength, Ben was brought down by an injury which would not have scathed a child. One day his hand received a slight graze from the wheel of a passing carriage on the crowded street—the skin was only ruffled. Ben wiped away the starting blood, and thought no more of the matter: in one week, thereafter, Big Ben was in his grave."

Mr. C. Edwards, in reference to the same class of men, remarks, "The whole cellular substance, is infiltrated with fluid, they are walking specimens of general dropsy. I have repeatedly witnessed diseases and accidents occurring in this class of persons. Their diseases are always of a dangerous character, and in case of an accident, they can never undergo even the most trifling operation with the security of the temperate. They almost invariably die under it, or it is followed by delirium tremens, erysipelas, typhus fever, mortification, and death."

IV. The same subject is intimately connected with the popular notion, *that intoxicating liquors impart to the human system a power to resist noxious influences.* Vicissitudes of climate, for example, such as extremes in heat and cold, local stagnations and exhalations; and in particular such disorders as are popularly supposed to be connected with, or conveyed by, some peculiar state of the atmosphere. Medical men have expressed various opinions on this subject, and strong recommendations to the use of spirituous liquors, under these circumstances, have not unfrequently been published. It is a fortunate circumstance, however, that investigation and experiments have shown the utter fallacy of these views. A few opinions of this nature are now submitted to the consideration of the reader. Fifteen physicians in the city of New York, unite in the following testimony:—"From observation derived from hospital, as well as private practice, we are convinced that alcoholic drinks *do not* operate as a preventive of epidemic diseases, but on the contrary, that they are

often an exciting cause. A large proportion of the adult subjects of epidemic diseases, are intemperate, and among these is disease likely to be fatal." And again, "The tone of the nervous system being impaired by the (frequent moderate) use of intoxicating liquors, the constitution thus becomes more susceptible to the impression of all noxious agents." "Ardent spirits," remarks Dr. L. Belden, "are to be ranked among the worst class of exciting causes of epidemic and pestilential diseases; and those maladies are the most dangerous in the persons of the intemperate." Dr. Harris, in an official report to the Secretary of the American Navy, states it as his opinion, that the moderate use of spirituous liquors has destroyed many who were never drunk, and that no fact is more satisfactorily established, than that those who use them freely, are the most exposed to the attacks of epidemic diseases." Dr. Cheyne makes the following observations:—"It is affirmed that an individual, in an unhealthy climate, while under the excitement produced by wine and spirits, is less liable to be acted upon by those exhalations from the soil, which taint the atmosphere and produce fevers and fluxes; but even granting the truth of this assertion, it must not be forgotten that the excitation produced by liquor is always followed by proportionate debility, during which the system is more than at any other time exposed to the action of a *malaria*."*

Dr. Trotter appears to be of the same opinion. "It ought to be remembered," says he, "that the exhausted condition of the body after ebriety, as much favours the action of *marsh effluvium* and *infection*, as the excited condition repelled it before. It is in this state that the fevers of tropical climates so readily seize our seamen and soldiers in the West Indies; the typhous contagion of this country is also extended in a similar manner."†

Dr. Mussey corroborates the same views:—"To a place among preventives of diseases, spirituous drinks can present but the most feeble claims. If under occasional drinking during the period of alcoholic excitement, a temporary resistance may be given to those morbid influences, which bring acute disease, be it occasional or epidemic, that excitement, by the immutable laws of vital action, is necessarily followed by a state of relaxation, depression, or collapse, in which the power of resistance is weakened, and this, too, in proportion to the previous excitement. In order, therefore, to obtain from alcoholic stimulus any thing like a protective influence against the exciting causes of disease, the exposure to those causes must be periodical, precisely corresponding with the stage of artificial excitation. If, however, such accuracy of

adjustment between the powers of vital resistance artificially excited, and the unhealthy agencies which tend to produce disease, be wholly impracticable, then the danger must be increased by resorting under any circumstances to spirit as a preservative; and if not, other articles would do as well."*

The *cholera*, perhaps, presents an appropriate illustration of these statements, as well as the most ample field of inquiry. It is not necessary for our present purpose to prosecute an inquiry, as to the contagious or non-contagious nature of this direful disease; it is sufficient to know, that it has visited almost every portion of the globe, and under every variety of climate. The facts are universally conclusive, that spirituous liquors, even when *moderately used*, have been in the highest degree favourable to the developement and propagation of this disease. This observation, it must be remarked, as the following illustrations testify, is the result of experience in all parts of the world, whether in the extreme temperatures of hot or cold, or the more moderate climate of Europe.

In England, the cholera made most appalling ravages among the ranks of the intemperate. A volume might be filled with facts of this kind. The Morning Herald of that period thus remarks on this fact:—"The same preference for the intemperate and uncleanly, has characterized the cholera *everywhere*. Intemperance is a qualification which it never overlooks. Often has it passed harmless over a wide population of temperate country people, and poured down, as an overflowing scourge, upon the drunkards of some distant town." Another English publication remarks, "All experience, both in Great Britain and elsewhere, has proved, that those who have been addicted to drinking spirituous liquors, and indulging in irregular habits, have been the greatest sufferers from cholera. In some towns the drunkards are all dead."

Professor Mackintosh, of Edinburgh, who ranks high in the medical profession, and who was physician to an extensive cholera hospital, states, that "drunkards were the persons generally attacked." In contrasting the causes predisposing to cholera, he also remarks, "and above all, the dissipated, particularly those addicted to the habitual use of ardent spirits."† It has been computed that five-sixths of all who have fallen by this disease in England, were taken from the ranks of the intemperate and dissolute.

In India, Ramohun Fingee, a native physician of great celebrity, declares, that "people who do not take spirits or opium, do not catch the disorder, even when they are with those who have it." In the army, under the command of the Marquis of Hastings, in India, consisting of *eighteen*

* A Second Letter on the Effects of Wines and Spirits, 1830, p. 17.

† Essay on Drunkenness, Chap. iv. p. 119.

* Prize Essay, by R. D. Mussey, M.D., &c., &c.

† Mackintosh's Elements of Pathology, p. 355.

thousand men, more than half died in the first *twelve* days. This dreadful mortality need to excite little surprise, when the effects of free indulgence in intoxicating liquors in hot climates are taken into consideration.

In China, observes Dr. Reiche, "the disease selects its victims from among such of the people as live in filth and intemperance."

"In Vienna," remarks Dr. Von Reider, principal physician to the cholera hospitals of that city, "the worst and most obstinate cases were those brought on by excitement from spirituous liquors."

In Paris, not less than 30,000 individuals were destroyed by the cholera, a large proportion of whom are said to have been either intemperate or profligate.

In Montreal, Dr. Rhineland, who visited that place during the prevalence of cholera, in the summer of 1832, states, "the victims of the disease are the *intemperate*—it invariably cuts them off." At a period when there had been twelve hundred cases of the malady in that city, a Montreal journal states, that "not a drunkard who had been attacked had recovered, and almost all the victims had been at least moderate drinkers."

From Montreal, writes Dr. Bronson, "Cholera has stood up here, as it has done everywhere, the advocate of temperance. It has pleaded most eloquently and with tremendous effect. The disease has searched out the haunt of the drunkard, and has seldom left it without bearing away its victim. Even moderate drinkers have been but little better off. Ardent spirits, in any shape, and in all quantities, have been *highly* detrimental. Some temperate men resorted to them, during the prevalence of the malady, as a preventive, or to remove the feeling of uneasiness about the stomach, or for the purpose of drowning their apprehensions; but they did it at their peril." Out of a thousand deaths in Montreal, only two are stated to have been members of the Temperance Societies. Dr. Bronson, of Albany, the last quoted authority, a man of great weight in the profession, and of considerable experience, makes the following observations:—"Intemperance of any species, but particularly intemperance in the use of distilled liquors has been a more productive cause of cholera than any other; and indeed than all others. Drunkards and tipplers have been searched out with such unerring certainty, as to show that the arrows of death have not been dealt out with indiscrimination. An indescribable terror has spread through the ranks of this class of beings. They see the bolts of destruction aimed at their heads, and every one calls himself a victim. There seems to be a natural affinity between cholera and ardent spirits." Dr. Sewall, of Washington, while on a visit to the cholera hospitals at New York, writes thus:—"Of 204 cases of cholera in the

Park hospital, there were only six temperate persons, and those had recovered," while 122 of the others, when he wrote, had died, and that the facts were "similar in all the other hospitals."

Dr. Charles A. Lee, of New York, who was connected with a cholera hospital, (Greenwich,) 1832, remarks, that there could be no reasonable doubt, that four-fifths of all *adults* admitted, had been intemperate. Out of more than 500 cases which came under their observation in that hospital, in 1832, and 1834, there were but *two* members of Temperance Societies; although several others, perhaps twelve or fifteen, were strictly temperate. Of the intemperate who were attacked, one-half died; of the temperate, about one in ten."*

The following is an analysis of 336 cases of death from cholera, which occurred in the city of Albany:—Intemperate, 140; Free Drinkers, 55; Moderate Drinkers, mostly habitual, 131; Strictly Temperate, 5; Members of Temperance Societies, 2; Idiot, 1; Unknown, 2; Total, 336.

The *Messenger des Chambres*, gives the following extract from a letter of a Warsaw physician:—"It is a positive fact, that the cholera does not seize on its victims at hazard, as many say. This contagion, up to the present period, has respected all persons who lead a regular life, and live in healthy places, and has struck, without pity, every man worn out by excess, and weakened by dissipation. *It has been ascertained, that out of every hundred individuals who die of this disease, ninety are in the habit of drinking ardent spirits to excess.* Women rarely addict themselves to strong liquors, and accordingly, few of them are attacked by the cholera."

Mr. Huber, who saw 2160 perish in twenty-five days, in one town in Russia, says, "It is a most remarkable circumstance, that persons given to drinking, have been swept away like flies. In Tiflis, containing 20,000 inhabitants, *every drunkard has fallen! All are dead—Not one remains.*"

Another example of the effects of alcoholic stimulus operating unfavourably, in regard to epidemic and contagious diseases, may be found in the case of *fever*, a disease which, next to cholera, perhaps, has proved the greatest scourge to drunkards and free livers. It is unnecessary, in this instance also, to inquire into the precise nature of this dangerous malady. It is sufficient for our purpose, to show that it is brought on, and materially aggravated, by the use of intoxicating liquors. "Every species of inflammatory and putrid fever," remarks Dr. Rush, "is rendered more frequent and more dangerous, by the use of spirituous liquors."† And again, "this has been remarked in all the yellow fevers which have visited the

* Bæchus. American Ed., p. 255.

† Medical Inquiries by Benjamin Rush, M.D., Philadelphia, 1793, vol. ii. p. 62.

cities of the United States. Hard drinkers seldom escape, and rarely recover from them."*

An aged physician, of forty years extensive practice, remarks, "Half the men, every year, who die of fevers, might recover, had they not been in the habit of using ardent spirit. Many a man, down for weeks with a fever, had he not used ardent spirit, would not have been confined to his house a day. He might have felt a slight head-ache, but a little fasting would have removed the difficulty, and the man have been well. And many a man who was never intoxicated, when visited with a fever, might be raised up as well as not, were it not for that state of the system which *daily moderate drinking* occasions, who now, in spite of all that can be done, sinks down and dies."† An aged physician in Maryland, states, that when the fever breaks out there, the persons who do not use spirituous liquors are not half as likely as others to have it; and when they do have it, that they are ten times as likely to recover.‡ According to Judge Cranch, the island of Key West, on the coast of Florida, was at one time remarkably sickly, and many died of the fever. It was found that those who died were, in every case, addicted to the habitual use of ardent spirit. The quantity used was afterwards diminished more than nine-tenths, and the inhabitants were remarkably healthy.¶

Desgenettes, in his Medical History of the French Army in Egypt, remarks, "Daily experience demonstrates, that almost all the soldiers who indulge in intemperate habits, and are attacked with fevers, die; nay, we may go further and say, that they have been more liable to an attack of disease."

In Ireland, the fever has at various times raged to an extent, and with a virulence, seldom witnessed in other countries. This, in a great measure arises from the use of ardent spirit in that country, and partly from the poverty and filth which is invariably found in close union with that practice. The publications of medical writers abound with convincing examples of these facts. In the first Report of the physicians of the Fever Hospital, Cork-street, Dublin, it is stated, that "it may lend a support to the numerous arguments against the abuse of spirituous liquors, so prevalent in this country, to state, *that fevers are peculiarly fatal where they attack the habitual dram drinkers.*"§ In the second Report of the same hospital, some remarks are made, relative to a greater proportion of deaths occurring among the male, than among the female patients in the hospital; and it is

added, "the greater irregularity in living, particularly the abuse of spirituous liquors, will explain the greater frequency at all times of fatal terminations of fever in the male sex."* The Report of the same hospital, in 1810, exhibits a similar result. In that of 1817, it is stated, that "those who are liberal in their indulgence in the use of spirituous liquors and animal food, are most susceptible of that species of fever which frequently has a fatal termination." And by the same physicians, in a Report to the Secretary of State, in 1818, "The disposition to procure a temporary oblivion of misery by habits of intoxication," is adduced, as "a powerfully disposing cause of fever."

Mr. Marshall, regards the error which prevails in respect to spirituous liquors, that they prevent the influence of the cause of endemic fever in tropical climates, as "a false and a dangerous opinion." Where, he observes, endemic fever prevails, the temperate, it is true, are attacked as well as the intemperate, but it is "universally admitted by medical men, that the former have a much better prospect of recovery than the latter." Again—"The use of spirits, even in a moderate quantity, has a powerful tendency to aggravate the violence, and to increase the danger of the diseases of warm climates. Strong liquors have certainly no legitimate claim to be considered as a means of preventing disease."†

Dr. Barry, in relation to the fever in Cork, states, "The greater proportion of fatal terminations which occurred in our hospital, originated in habits of intoxication."‡ The surgeon-general of Ireland, also testifies, that "the disease mostly proved fatal to such as had been given to wine or distilled spirits, before they were carried to the hospital."¶ "In Armagh," remarks Dr. Harty, "a greater proportion of the rich than the poor died; particularly if they lived full, and were subject to drink much spirituous liquors."§

Dr. Trotter (at that time Physician to Lord Howe's fleet,) remarks, that among the seamen, "where the contagion of fever is prevalent, it (the use of spirits) is a never failing cause of the increase of the disease." Dr. M'Callum adds, "from what I have observed, I believe it to be the most powerful remote cause."¶ In London, according to authentic documents, there is every reason to believe, that the mortality which attended the great fever of 1739, owed its almost unprecedented fatal character to the

* Second Report, Cork-street Fever Hosp. p. 12,

† Observ. on the Abuse of Spirituous Liquors, &c., in India.

‡ Report of Fever Hospital of the City of Cork, by Dr. Milner Barry, Cork, 1818, p. 21.

¶ Report of the Fever Cases in Stephen's Hospital, &c., by the Surgeon-General, p. 51, 1817.

§ Historic Sketch of the Epidemic Fever of 1817, by Doctor William Harty, Dublin, p. 167, 1820.

¶ Medicina Nautica, Article Contagion, vol. i. p. 202.

* Medical Inquiries by Benjamin Rush, M.D., Philadelphia, 1793, vol. ii. p. 62.

† Fifth Report of the American Temperance Society. Appendix, p. 52, 1832.

‡ Ibid. p. 53. ¶ Ibid. p. 53.

§ First Report, Cork-street Fever Hospital, p. 26.

free use of ardent spirit at that period. Dr. Short, in his account of this extraordinary mortality, says, "The like was the fate of all tipplers, dram-drinkers, and punch merchants, scarcely any other died of this severe fever."* And again, concerning the persons to whom the fever of 1741 was most fatal, he adds, "but of pot-companions, and dram-drinkers, none recovered."†

"It is stated," says the Report of the Scottish Temperance Society for 1831, "that fever has been lately very prevalent in Kilsyth, and that in almost every case where it terminated fatally, the victim was addicted to spirit drinking."‡

Dr. Bell informs us, that when small-pox prevailed so extensively in the city of Philadelphia, in 1823-4, he never knew of a drunkard who recovered from an attack of the natural disease; that is, where neither vaccination nor inoculation had been practiced: he for the most part died delirious. |

"The history of almost all epidemics," observes Professor Francis, "furnishes proofs most ample, that comparatively little chance exists of exemption from their direful effects, on the persons of those whose physical constitutions have been impaired by inebriating drinks: and, if indeed, occasional examples occur of individuals addicted to such pernicious beverage, being seemingly thereby enabled to brave the influence of disease for a while, yet it is to be borne in mind how certain and fatal is the arrow of pestilence, when directed among the victims of habitual indulgence in ardent and diffusible stimuli."§

Not only do medical men under such circumstances despair of a successful termination of an attack of cholera, fever, or the small-pox, but the same fears are excited with regard to almost every variety of disease that afflicts mankind. "It would take a volume," remarks Dr. Rush, "to describe how much disorders, natural to the human body, are increased and complicated by the use of spirituous liquors." Indeed, almost the whole catalogue of human disease might be included in this well-founded statement.

The use of spirituous and bitter compounds, as preventives of disease, has, in innumerable instances been productive of opposite effects, and induced such a state of the system, as was most favourable to its vigorous developement. Pucinotti, for example, attributes the severe character of the Roman fevers, in many cases, to the use of spirits, bark, and other stimulants, commonly employed as preventives. The *Malaria* fevers which commonly prevail in the country about Rome, prove very destructive to those whom they attack. This writer relates

the following case:—An old man came from Romagna every two years, to labour during the harvest in the Campagna of Rome. *He was never, during these visits, attacked with the fever.* His beverage, both in the morning and through the day, was *water, with a little lemon juice.* His father before him had adopted the same practice with similar success. His two sons, however, used spirit, (brandy) and even at one time mixed with it gunpowder, and at another time cayenne pepper. Both of them fell victims to the fever.

The following example was published some years ago, during the prevalence of the cholera in India:—"Two bodies of men, one amounting to 300, the other to 100 persons, were located in adjoining situations when the cholera appeared. The small body immediately determined to live temperately and by avoiding the night air, and the other predisposing circumstances, which were obvious, to endeavour to escape the distemper. The plan succeeded so well, that only one individual was siezed of the 100. The larger body adopted no precaution. They lived in their usual way, and one-tenth of their whole number perished."

The author's personal experience is strongly conclusive of the superior advantages of temperance as a preventive of disease. During the prevalence of the Asiatic cholera, some years ago, it was his lot to be extensively employed, night and day, for upwards of two weeks, in attending to persons labouring under this dreadful disease, subjected, of course, at the same time, to extreme mental and bodily excitement. During that period, as was his usual practice, he drank nothing stronger than coffee, tea, or cold water, being at the same time in other respects, exceedingly temperate in his diet. This practice, combined with a cheerful disposition and unruffled mind, under the blessing of God, brought him unscathed and untouched, through all the dangers of the pestilence; while on every side, numbers of drunkards and moderate drinkers fell sudden victims to habit and disease. His experience, however, but resembles that of others placed under similar circumstances, and adopting the same precautions.

A little reflection will show the propriety, as well perfect adaptation, of this practice. No effectual preventive of disease exists, but in the due performance of those laws which best secure the healthy operations of the animal functions. A healthy tone of the stomach, the grand centre of digestion, is doubtless a most important, if not essential, source of bodily vigor, as well as mental equanimity. The effects of indulgence in alcoholic drinks, in whatever quantities, are most marked. In epidemic cholera, and in fever generally, the first symptom which manifests itself, is an irritable state of the stomach, evidenced by uneasiness, in addition to a sense of burning, accompanied by a parched condition

* Chronological History of the Seasons, &c., London, 1759, vol. ii. p. 251.

† Ibid. p. 72.

‡ Rep. Scottish Temp. Soc., 1831, p. 32.

|| Journal of Health, vol. i. p. 14.

§ Bacchus, American Ed., p. 466, Appendix.

of the mouth and throat, excessive thirst, and weakened appetite. All stimulating compounds increase rather than diminish these distressing symptoms; they add indeed fuel to the fire, and increase that state of excitement which it ought to be the first object of the medical man to subdue. Thus, of all other expedients, alcoholic drinks are least calculated to ward off contagious disease; on the contrary, they predispose the system to its speedy and effectual reception. If on occasions of danger, any alteration of diet be required, it is the abandonment of all those practices which unnaturally tend to disturb the healthy performance of the functions, and which diminish, if not destroy, the only certain check to disease—a sound and well regulated condition both of body and of mind.

V. *The systems of individuals blessed with a vigorous and healthy constitution, are enabled powerfully to resist the influence of intoxicating liquors.* This circumstance will account for the fact that hard drinkers are not unfrequently known to live to an advanced period of life. The advocates of strong drink dwell with considerable satisfaction on this apparently contradictory fact. The following anecdote, among numerous others, is often quoted by way of illustration:—On one occasion, in a court of law, two witnesses appeared before the bench, advanced on life's list, but hale and hearty in their appearance. The judge, surprised at the healthy appearance of one so old, made inquiries of the first witness as to his mode of life, and, in particular, his course of diet. During these interrogations, it appeared that he had from an early period of his existence, *drank nothing stronger than water.* Upon hearing this statement, the learned judge commented with considerable eloquence on the advantages of temperance, the good effects of which so striking an example was then presented for their imitation. Shortly afterwards the second witness appeared in evidence. To the surprise of the judge, as well as of the legal gentlemen who sat on the bench, it appeared on the man's own confession, *that he had seldom or never gone to bed in a sober state.* The tables were now turned, and, to a casual observer, the evidence on both sides, appeared to be equal. On a more careful examination, however, it will be found that long-lived drunkards are exceptions to a rule general in its results. The peculiar habits of the drunkard engage that degree of observation, which more sober members of society fail to attract. Hence, thousands of temperate individuals, vigorous in mind, and strong in body, arrive almost unnoticed at a green old age, while the aged, and seemingly *healthy drunkard*, if such a phrase be not deemed absurd, is held forth and pointed at, as an example of the harmlessness, if not beneficial influence of inebriating compounds.

Bishop Berkeley, in his Essay on Tar

Water, has a forcible passage on these unenviable members of society. “Albeit,” he remarks, “there is in every town or district throughout England, some tough dram-drinker set up as the devil's decoy, to draw in proselytes.”

Dr. Cheyne, of Dublin, relates an anecdote, which may serve as an additional illustration. A gentleman, far advanced in years, one of Bishop Berkeley's “devil's decoys,” on one occasion boasted that he had drank two, three, or four bottles of wine every day for fifty years, and that he was as hale and hearty as ever. Pray, remarked a by-stander, where are your boon companions? “Ah,” he quickly replied, “that's another affair; if the truth may be told, I have buried three entire generations of them.”

Dr. Beddoes, a physician of high reputation, in allusion to the popular objection that all who indulge in the use of intoxicating liquors are not injured, remarks, that we are perpetually reminded of the exception, as an excuse for a practice so universally marked by medical observers as destructive. But neither, he continues, do *all* who are exposed to its contagion catch the plague. And yet is the hazard sufficient to induce every man in his sober senses to keep out of the way of infection.

Dr. Rush argues much in the same strain. “The solitary instances of longevity,” he observes, “which are now and then met with in hard drinkers, no more disprove the deadly effects of ardent spirits, than the solitary instances of recoveries from apparent death by drowning, prove that there is no danger to life from a human body lying an hour under water.”

On reference to authentic data, however, it is found that intemperate persons do not escape the consequences which result from unlawful indulgence. A few additional illustrations are now adduced.

Dr. Parry details the cases of two gentlemen, each of whom drank, in a day, a bottle of gin, the same quantity of rum, and two bottles of Madeira. One was afflicted, for some time, with mental alienation, and put under the necessary restraint. The other, for many weeks, had repeated attacks of epilepsy, followed by occasional wanderings of perception. The following case fell under the observation of Mr. Cheselden, an anatomist of great celebrity:—A man died through excessive palpitation of the heart, occasioned by hard drinking. He had indulged in this habit for years. About ten inches of the largest vessel that issues from that organ, was found to be distended with blood, and about three times its natural diameter.

Dr. Cheyne details the following case:—A naval officer took two or three tumblers of grog daily. On one occasion, after feasting with some officers for two days, who “tarried long at the wine,” he became sick, complained of intense head-ache, and remarked, that *he believed one-half of his head was*

separating from the other, and that he felt a conviction, that he could not long survive such sensations. At midnight he died. A considerable quantity of coagulated blood was found in the brain. The liver was marbled with spots of a yellow colour, and its structure was so changed, that when a little force was used in handling it, it broke short. The biliary vessels were full of a dark ropy bile; while the stomach on its inner surface, was thickened and unnaturally inflamed, and externally studded with a great number of little stars of a rich lake colour.

Mr. Chevalier relates the case of a boy, named Froome, fourteen years of age, who, at a Christmas feast, ate heartily, and drank rather freely of gin and water. In the course of the next evening, he became sick, and vomited violently. These symptoms continued at intervals during the night, and the following morning he went out for a short time, but felt very ill, and observed, that his blood was boiling at his heart. In two days afterwards, he became short-breathed, unable to swallow, and felt great anxiety, with frequent efforts to vomit. After a scene of much suffering, he vomited near two pints of blood, and soon afterwards expired. The stomach, on the body undergoing a post-mortem examination, exhibited, in various places, a torn condition of its internal coat.

Dr. Cassel, who, some years ago, published an article on the subject of intemperance, relates the following three cases, in addition to some of the examples which have already been detailed:—A man, thirty-three years of age, habituated to the free use of wine and tobacco, complained of pain in the left side of his head, with pain and weakness of the neck. After a violent fever, he expired on the eleventh day of his illness. An ulcer and purulent matter were discovered on the basis of his brain. A man, about twenty-eight years of age, who ate and drank to excess, fell into an universal dropsy. About seven days before his death, he suffered from laborious breathing, with a cough and pain in the chest. A woman, forty years of age, much accustomed to eat salt victuals, and drink generous wine, had been for many years subject to pains of the stomach, a loss of appetite, and other bad symptoms, which continued till she died. Part of the internal surface of her stomach was found of a livid colour, its coats very much thickened, and an abscess had been discharged.

Dr. Darwin narrates the following interesting case:—Mr. C. and Mr. B., two very strong men, who had drank ale at their meals, instead of small beer, suddenly became weak, lost their appetite, flesh, and strength. Their skin became of a yellow colour. In about two months' illness they died. A few days before their death, Mr. C. became dropsical, and Mr. B. had frequent and great discharges of blood from an issue, and some parts of his mouth.

These illustrations might be multiplied to an almost unlimited extent.

VI. *The influence of this stimulant in aggravating diseases, which already exist, and in destroying the susceptibility of the system in regard to the curative effects of medicines and medical treatment,* forms a necessary and important subject of investigation.

Stimulating liquors aggravate diseases which already exist. Medical men have frequent cognizance of this fact. In diseases of an inflammatory character, in particular, it is a matter of necessity, altogether, to restrict invalids from the use of any kind of intoxicating liquor. In chronic cases, especially, the moderate use of stimulants has, in innumerable instances, protracted the sufferings of the unfortunate victims of disease, and completely baffled the remedial measures of medical men. On the removal of moderate stimulus, a disease, perhaps of many years standing, totally disappears, without the aid either of medicines, or medical treatment. Such is the restorative power of nature when uninfluenced by artificial agents.

The following interesting statements of an individual, resident in Laneashire, whose name and residence are known to the author, well illustrates this position. "Being accustomed," remarks the narrator, "to farmer's labour from infancy, when approaching manhood, I began to take a full share in the toils of the hay and corn harvest, and was then permitted to take a man's allowance of ale, each day, which was merely one pint in the afternoon. I have frequently exchanged my pint for a basin of milk, and always found myself better without ale; for, after the labour of the day was over, I felt myself heavy, dull, and lifeless, when I had taken ale; and when without, however fatigued in body, my faculties always maintained their natural clearness, and usual composure." "Having," he continues, "been from home more than thirty years, and during that period having experienced twelve transitions from and to sedentary and active situations in life, in various counties, my frame has felt the effects of such various transpositions. The use of ardent spirits and malt liquor to which I, in a measure, became addicted, brought on surfeit and scurvy, which finally settled in my legs, with inflammation, a cure for which became a matter of serious consideration, and I found it absolutely necessary to abstain from all kinds of spirits and malt liquor, because after having taken a small quantity of either, I always found the inflammation increased and a cure retarded; BUT BY A CESSATION FROM THEM I FOUND CONGENIAL APPLICATIONS EFFECTUAL, AND BY REFRAINING FROM THEM ALTOGETHER, I AM RESTORED TO CLEAR SOUNDNESS."

"A few years ago," says Mr. Beaumont, "I was sent for to an elderly gentleman, who

was dangerously ill. His symptoms consisted of distressing dyspnea, obstinate constipation, nausea, and occasional vomiting, tenderness over the pit of the stomach, and on the right side, sallowness of complexion, and tinge of the conjunctiva, emaciation and extreme debility, with evident signs of incipient ascites. I readily discovered a key to all this mischief, on learning that my patient had been subject to a gangrena senilis, of the metatarsus and toes, for which he had been *enjoined* to take freely of brandy, wines, &c., which had undoubtedly laid the foundation for the truly formidable symptoms on which account I was consulted. I immediately put my patient upon the antiphlogistic system, by which, along with a suitable course of medicine, I ultimately succeeded in removing the chronic inflammation from the internal parts; so that he quite recovered from all the symptoms, and by continuing a water beverage, *his foot got well*; and this original disease has never returned, although previously, whilst using a stimulating diet, the symptoms returned every few months, entailing serious doubts as to the necessity for amputation.”*

Dr. Cheyne, of Dublin, aptly remarks, that those who have heard how large a quantity of fermented liquor may sometimes be taken without injury, ought also to know how small a quantity may prove injurious; otherwise, he remarks, the question at issue has not been fairly submitted to their judgment. “Wine,” observes this physician, “even in a small quantity, sometimes so offends the stomach, as to cause immediate vomiting. I have known many individuals who have repeatedly tried to drink wine, but were obliged to desist, as half a glass at any time, would throw them into a fever, which would last for several hours, and cause great languor on the following day. I have read of a physician who had, for a long time, abstained from fermented liquors, and who, having occasion to take medicines, which were administered in a spirituous vehicle, complained that a distressing excitement was produced by a quantity of spirits which could not have exceeded a tea-spoonful.”†

An additional illustration adduced by Mr. Crampton, Surgeon-General in Ireland, and published in the Dublin Hospital Reports, presents a most powerful proof on the subject in question. A gentleman, of a fair complexion, and rather delicate frame, who laboured under a severe pain of a periodic nature, which depended upon an inflammation of the periosteum of the right tibia, noticed a circumstance with respect to the influence of fermented liquors on this affection, “which,” remarks Mr. Crampton, “appears to be of considerable importance, as illustrative of the effects of even very small quantities of alcohol in diseases of an inflam-

matory nature. He observed, at first, that the pain invariably recurred within an hour after dinner, at whatever time he might have taken that meal, and whether the food had been animal or vegetable. Suspecting that this might be connected with the nature of the liquid, rather than the solid matter which he took into his stomach, he left off fermented liquors; on the first day after he had made the change, the pain did not return till he had been an hour in bed; this led him to institute a number of experiments upon the influence of different kinds of fermented liquors, in different quantities; the result was, that the pain could with certainty be excited, within an hour, by drinking a glass of any kind of fermented liquor, however weak, and a single drachm, by measure, of port wine, diluted with four ounces of water, acted with equal energy as a glass of the undiluted wine.”

The influence of alcoholic liquors produces such a state of the system, as, in active disease, prevents the necessary curative effects of medicines and medical treatment. This fact is familiar to the members of the medical profession.—The use of stimulants impairs, if it does not totally destroy, the *tone* of the nervous system, and thus vital exhaustion is induced, at a time when its resisting energy is most required. For this reason, many diseases run on *uninfluenced* by medical treatment, and in many cases, where there is great *exhaustion*, medicines are often entirely useless, and the disease terminates fatally, in spite of every curative exertion. The following is the result of extended observation on the part of fifteen of the most eminent physicians of New York:—“When a person accustomed to spirituous drinks is seized with an inflammatory disease, he is in the following predicament; the disease requires that bleeding and other evacuations should be used, which the habits of the patient will not permit; the habits require the administration of stimulants, which aggravate the disease. In either case, the result is death. Evacuations exhaust the little remains of susceptibility, and stimulants exalt the disease, and prevent the cure. If, on the other hand, the disease is a chronic one, or not accompanied with febrile action, as in dropsy, which is often produced by intemperate drinking, then the predicament is nearly the same. The patient wants strength to resist the disease, and is desirous, by medical aid, to effect a cure; but the susceptibility of the system to the operation of medicine is nearly exhausted, and the remedies will not act. There is no cure but death. If to arouse the little remains of susceptibility, the patient resorts to previous habits, spirituous potations, the disease is aggravated, and its termination surely fatal.” Dr. R. G. Dods, of London, on being asked “Do habits of intemperance at all interfere with medical treatment in cases of disease?” replied,

* An Essay on Alcoholic Drinks. p. 40.

† Letter on Wine and Spirits, p. 14.

"That forms one of the strongest points of evidence on which a medical man can give his opinion; there is not a single acute attack which persons are liable to, who are accustomed to the use of ardent spirits, which we have much hope of being able to cure; the probability, as compared with similar attacks on temperate persons, is as ten to one against recovery. The explanation is simply this: the acute attack coming on requires the abandonment of intemperate habits, prompt treatment, free blood-letting, and other active remedies, which, without his usual stimuli, the patient cannot bear."* It is unnecessary to dwell further on this subject. The same influence, more or less, interferes with the successful treatment, and professional remedies employed to remove almost every variety of disease which afflicts mankind. Alcohol has been at all times, not only a source of great mischief to the patient, but a powerful means of counteracting and discouraging the judicious efforts of the enlightened and persevering physician.

VII. *Intemperance has a deteriorating influence, in respect to the physical energies and powers of the present generation.*—The experience of all ages has shown the injurious effects of intemperance, in prostrating the physical powers of man. Several causes, however, contributed to modify these effects on the ancients, and on our more proximate ancestors. The athletic exercises, the warlike habits, and the agricultural pursuits in which they engaged, prevented very much the injurious effects of their intemperate habits. And hence, persons who labour hardily, and who reside in the country, are less easily injured by strong drinks than those who are of contrary habits, and reside in a confined and vitiated atmosphere. The reasons are obvious; exercise, in addition to pure air and plain diet, forms an excellent counteracting influence. These individuals, in general, drink heavily for a day or two, and perhaps do not again become intoxicated for a length of time. Nature consequently, in some degree, has time to recover her accustomed tone of feeling and power of action, before she is called upon to sustain another attack upon the citadel of her existence.

Dr. Farre relates an example in point. A female, who underwent great bodily exertion, by his permission, drank a quart of beer daily. Her uncle died and left her a large fortune, on which she passed from a state of most active life, to a state of perfect ease. In this sedentary state she continued to take every day her former allowance of malt liquor. The result was, that from a spare habit, she became sleek and fat, and died of chronic inflammation of the liver, which produced jaundice."†

Dr. Farre also relates the following illustration of the effects of indulgence in ale:—A country farmer, who went through the highest animal exertion, took of the strongest ale, to the extent of seven pints per diem. This man who had possessed a most vigorous constitution, and had been capable of living to the full term allotted to man, was blind, and injured in other important functions, at the age of 42.*

Smollett, as we have seen, remarks, that "all the peasants of France, who have wine for their ordinary drink, are of a diminutive size in comparison to those who use milk, beer, or even water."†

Nor can these facts excite much surprise, when we reflect upon the amazing extent and virulence of those diseases which originate in the use of strong drink.

In large towns, the pale features and emaciated bodies of its victims, present the most convincing proof of the influence of strong drink on the physical powers. The late Parliamentary Report alludes, in strong terms, to this fact. "The diminution of the physical power and longevity of a large portion of the British population, the loss of personal beauty, the decline of health, and progressive decay of the bodily and mental powers," are enumerated as among the effects of intemperance, "which evils," it goes on to say, "are accumulative in the amount of injury they inflict."‡

VIII. *Intemperance is not only hereditary, but it entails upon posterity, physical debility and disease.* Several of the most distinguished philosophers of ancient and modern times remark, in strong terms, on the consequences entailed upon posterity by intemperance. Plato, in particular, alludes to the hereditary transmission of drunkenness; and Plutarch expresses himself a believer in the same doctrine—"Ebrii gignunt ebrios." Aristotle appears to have been of the same opinion, for, he remarks, that "*Drunken women bring forth children like unto themselves.*" Shakspeare also seems to have been convinced of the same lamentable fact. The expressions which he puts into mouth of Falstaff, are sufficiently conclusive of this point.|| Burton, in his humorous and quaint style, makes a similar allusion. In another portion of his work, he speaks of "Tiberins, who was a common drunkard, because his nurse was such a one."§ Diodorus also states this fact: Nero's nurse, according to this writer, was much addicted to drinking.¶ Dr. Darwin thus expresses himself: "It is remarkable, that all the diseases arising from drinking spirituous or fermented liquors, are liable to

* Parl. Evid. p. 223.

† Ibid. p. 107.

* Parl. Evid. p. 107.

† Travels through France and Italy, 1776.

‡ Report of the Select Committee, p. 5.

|| Vide Henry IV. Part ii. Act 4.

† Burton's Anatomy of Melancholy, 16th ed., p. 218.

¶ Diodorus Siculus, Lib. 2.

become hereditary, even to the third generation, gradually increasing, if the cause be continued, till the family becomes extinct."* Dr. Trotter remarks, that "whatever may be the truth of this doctrine, sobriety in husband and wife must give the best chance for a sober progeny."†

The following statement is made in the Report of the Select Committee on Drunkenness: "Intemperate parents, according to high medical testimony, give a taint to their offspring even before its birth, and the poisonous stream of ardent spirits is conveyed through the milk of the mother to the infant at the breast; so that the fountain of life, through which nature supplies that pure and healthy nutriment of infancy, is poisoned at its very source, and a diseased and vitiated appetite is thus created, which grows with its growth, and strengthens with its strength, increasing weakness and decay."‡ The celebrated Dr. Gall mentions a strong fact, as to the passion for intoxicating liquors being hereditary.|| Dr. Caldwell of America, makes the following observations on the transmission of hereditary qualities:—"By habits of intemperance, parents not only degrade and ruin *themselves*, but transmit the elements of like degradation and ruin to their posterity. This is no visionary conjecture, the fruit of a favourite and long cherished theory. It is a settled belief, resulting from observation—an inference derived from innumerable facts. In hundreds and thousands of instances, parents having had children born to them while their habits were temperate, have become afterwards intemperate, and had other children subsequently born. In such cases, it is a matter of notoriety, that the younger children have become addicted to the practice of intoxication, much more frequently than the elder, in the proportion of five to one. Let me not be told, that this is owing to the younger children being neglected, and having corrupt and seductive examples constantly before them. The same neglects and profligate examples have been extended to all; yet all have not been equally injured by them. The children of the earlier births have escaped, while those of the subsequent ones have suffered. The reason is plain. The latter children had a deeper animal taint than the former."§ On this subject, among medical men in the present day, there exists little difference of opinion.

Experience, however, leads us to conclude that intemperance in the parent, not only induces in their offspring a predisposition to the same vice, but that the diseases of the parents induced by drunkenness, or at least morbid tendencies to the same, are transmitted to their unfortunate children.

Dr. R. G. Dods, after adverting to the fact, that "the child of drunken parents inherits an hereditary predisposition to the use of spirituous liquors," remarks as follows:—"Parents suffering under disease of the liver, or any other organ, from the excessive use of spirits, give rise to children whose constitutions possess strong tendencies to similar morbid actions, and these morbid actions not only lead to habits of intemperance, with the vain hope of relief from uneasiness, but are greatly increased by such practices. In fact improper indulgences of any kind, when persisted in by the parents, and repeated by their offspring, tends to debilitate succeeding generations, and render them liable to the most painful and incurable diseases; hence scrofula, and a host of other maladies. By such habits one generation after another becomes more and more effeminate, till they scarcely deserve the name of human beings."* The strength of our country, undoubtedly to a considerable extent, depends on the vigor and health of the population. We cannot therefore expect our nation to retain its present position and power, if the people of whom it is composed continue to indulge in sensual and intemperate habits.

SECTION V.

DISEASES WHICH ARISE FROM THE USE OF INTOXICATING LIQUORS.

"Not a blood-vessel, nor a nerve, nor a tissue, escapes the influence of this poison (alcohol;) the whole animal machine is the theatre of its display."

PROF. FRANCIS.

"All maladies

Of ghastly spasm, or racking torture, qualms
Of heart-sick agony, all feverous kinds,
Convulsions, epilepsies, fierce catarrhs,
Intestine stone and ulcer, cholic pangs,
Demoniac phrenzy, moping melancholy,
And moon-struck madness, pining atrophy,
Marasmus, and wide wasting pestilence,
Dropsies and asthmas, and joint racking rheums."

MILTON.

- I. Fevers.—II. Inflammations.—III. The stomach and its functions.—IV. The intestines, pancreas, spleen, and their functions.—V. The liver and its functions.—VI. The heart, blood-vessels and their functions.—VII. The lungs and their functions.—VIII. The urinary organs and their functions.—IX. The organs of generation and their functions.—X. The absorbent system and its functions.—XI. The skin, hair, and their functions.—XII. The muscular system, bones, joints, and their functions.—XIII. The organs of the senses and their functions.—XIV. The teeth and their functions.—XV. Premature old age.

THE diseases which directly or indirectly originate in the use of intoxicating liquors, present an exceedingly fruitful subject of investigation. These disorders indeed are so

* Botanic Garden, part ii. note on *vitis*.

† Essay on Drunkenness, p. 29.

‡ Parl. Evid., p. 5.

|| Sur les Fonctions du Curveae, i. 410.

§ Transylvania Journal, pp. 341-2.

* Parl. Evid. pp. 219-20.

numerous and so obstinate in their character, as to form a very principal source of emolument to the medical profession.

It would be impossible, in an Essay like the present, to enter into either a minute or professional investigation of those afflictive maladies which arise from this prolific source of physical derangement. It is therefore intended in the present section, to glance generally only at the most important of these, and in such familiar language as will be understood by the popular reader.

I. *Fevers*.—Fevers of various kinds are commonly excited by habits of intemperance. Every act of intoxication constitutes in fact a state of febrile excitement, and continued excitement either terminates in confirmed or pure fever, or induces a condition of body most favourable to such attacks. Fever, *febris*, receives its name from *ferveo*, to glow, to be hot, because one of its most prominent symptoms is a sense of increased heat. Its generic term *Pyrexia* from πυρέσσω, *puresso*, is derived from πῦρ, *pūr*, fire, and signifies therefore the same condition of the system. Most of those diseases which arise from strong drinks, are more or less accompanied with febrile action—in particular that form which is known by its specific name *synocha*, or inflammatory fever. Drunkards are subject to attacks of putrid or typhus fever, which have in general a fatal termination. Intemperance in all climates acts as one of the most powerful excitants of fever. This subject received special attention in the last section; it is unnecessary therefore to enter into further details.

II. *Inflammations*.—The term inflammation, from *inflammo*, to burn, well expresses the effects of alcoholic liquors on the human frame. The distinctive characters of this condition, are *pain*, *swelling*, *heat*, and *redness*. An inflammatory disposition of the system, is the invariable consequence of indulgence in inebriating drinks. The habitual use of these liquors indeed, renders the body not unlike tinder, which is readily fanned into a blaze by contact with even the most trivial spark.

Intemperance produces inflammation in various ways. 1. *By direct excitement of the inebriating agent*.—The presence of alcohol in the body, is at all times a source of irritation and annoyance, and these effects are in proportion to its quantity and strength. We have already shown, that alcohol permeates the whole system, and in its noxious progress, comes in contact with all the vital organs and tissues of the human frame. Hence a variety of inflammations, the immediate result of contact with this poisonous fluid.

2. *It increases the tendency to inflammation*.—It predisposes the system to this condition by the *feeble state of the physical powers*, which it directly induces. Thus irritating agents, in a state of health, pro-

ductive of no injurious results, such as severe cold or other common excitants, act powerfully on a debilitated frame; and inflammation of the lungs, bowels, and other vital organs, is the result. A melancholy illustration of this fact, is found in the Statistical Reports on sickness and mortality of our troops in the East and West Indies, and other of our possessions. W. Burke, inspector-general of His Majesty's hospitals, informs us, that in these climates, "*fevers, delirium tremens, cerebral congestion, phrenitis, apoplexy*, frequently are immediately excited by the use of strong liquors."* Again, "The destructive effects of intemperance, as a predisposing cause, are almost peculiar to hot climates, especially in inducing *hepatitis*, and *dysentery*, so generally dependent on disease of the liver, which bears the onus of disease in hot climates. During the indirect debility succeeding these acts of intemperance, there are then more of the endemics of the country, *fever, hepatitis, dysentery*, and *cholera morbus*."†

The following are forcible illustrations of the difference in regard to disease and mortality, between those who indulge in spirituous liquors, as compared with those who entirely, or for the most part, refrain from their use.

A surgeon of the Bengal Cavalry, remarks, that in a regiment of *Europeans*, who daily indulged in their drams, great numbers had suffered, and some died of hepatitis or inflammation of the liver. In one of the *native* regiments, however, (who used water only as their beverage,) he had never known, during three years, one of the men labouring under the same disorder.‡

"The great difference," says the inspector-general of hospitals, "in the diseases between the Europeans and native soldiers is in *hepatitis* and *dysentery*. In the native troops, at one station (Meerut) only one case of hepatitis, out of 3,898 men, was admitted into the native hospitals in two years, while among the European soldiers, consisting of 2,088 men, there were admitted 165 cases of the same disease, of which no less than nineteen proved fatal. In the same station for the period of two years, in *dysentery*, out of 3,989 *native* troops, two died of that disease; whereas fifty-two Europeans died out of a strength of 2,088 men. Dr. Burke correctly remarks, that dysentery in India is generally more or less connected with a diseased state of the liver, the consequence of intemperance. With the natives, however, such is not the case. The disorder with them is less *inflammatory*, and induced generally from exposure to the weather and errors in diet.||

A few extracts from the statistical returns of disease and mortality of our troops in the Windward and Leeward Islands, well illus-

* Parl. Evid., p. 430, Appendix.

† Ibid. pp. 433-4, ‡ Ibid. p. 433. || Ibid. p. 451.

trate this subject. The European troops are much addicted to intemperance. The Black troops, are much more temperate in their habits, although from their unfortunate contact with the more dissolute whites they do not altogether refrain from the use of strong drink. The returns include a period of twenty years disease and mortality among the troops in the Windward and Leeward Islands, from 1817, to 1836.

Colour.	Strength of Force in 20 Years.	Diseases.	Number of Cases.	Proportion of Cases.	Number of Deaths.
Whites.....	86,661	{ Fevers }	62,163	1 in 1¼	3,195
Blacks	40,934		6,856	1 in 5	190
Whites.....	" "	{ Liver }	1,946	1 in 44½	161
Blacks	" "		301	1 in 136	37
Whites.....	" "	{ Stomach & Bowels }	36,474	1 in 2⅔	1,795
Blacks	" "		3,796	1 in 10¾	303
Whites.....	" "	{ Brain }	2,447	1 in 35⅔	312
Blacks	" "		428	1 in 95½	92

Disease and mortality among the Dragoon Guards and Dragoons in the United Kingdom, from 1st January, 1830, to 31st March, 1837.

	Strength of Force in 20 Years.	Diseases.	Number of Cases.	Proportion of Cases.	Number of Deaths.
Dragoons and Dragoon Guards in Great Britain }	44,611	Fevers	3,327	1 in 13⅔	60
	" "	Liver	337	1 in 132⅔	19
	" "	Stomach and Bowels	4,193	1 in 10⅝	32
	" "	Brain	293	1 in 152	32

Dr. Burke informs us, that the average age of men in native regiments, exceeds that of men in European corps. Few in the latter are more than forty or forty-five years, whereas in the native corps there are many upwards of fifty or sixty years of age. It is true this is the natural climate of the Sepoys, but *Europeans who live temperately, are as healthy as the natives.* The European soldiers would be just as healthy if they restricted themselves in the use of strong drink, and avoided other causes.*

A number of illustrations of the *terminations of inflammations* will be adduced in the present section. They form striking but melancholy examples of the effects of intemperance on the human frame.

III. *The stomach, its functions and diseases.*—The healthy performance of all the functions of the human frame, principally depends on proper digestion. Hence the importance of the stomach and its operations.

It is the store-house and the shop of The whole body. True it is That it receives the general food at first, But all the cranks and offices of man, The strongest nerves, and small inferior veins, From it receive that natural competence Whereby they live. SHAKSPEARE.

One of the first evils consequent on the use of alcoholic liquors, arises from the unnatural irritation and irregular action to which the stomach is thereby subjected. The application of alcohol in any of its varied forms, causes irritation or excitement of the coats of the stomach, in other words, diseased action. This undue excitement terminates in a loss of that natural *sensibility to food*, which previously had formed its most valuable property; in addition to an incompetency to receive that peculiar and salutary stimulus, which actual contact of the food creates, and which is in a great degree necessary to healthy digestion. A slight examination of the structure of the stomach will account for these phenomena. It is composed of several thin coats or membranes. The *inner, mucous, or villous*

* Parl. Evid. p. 454.

coat, is of an extremely delicate structure, not unlike velvet in its appearance. It is composed of a vast number of nerves and blood-vessels, and underneath its surface, are situated the mucous *follicles* or glands, which secrete a glairy fluid for its protection. Alcohol, in whatever quantity, unnaturally irritates this exquisitely delicate net work. An increased flow of blood takes place, combined with an unnatural excitement of the nervous energy. The one is followed by subsequent *collapse*, the other by *want of tone*—each the result of infringement of the laws of our nature, by which all unnatural action is succeeded by depression, equal in amount to the primary cause of excitement. Continued irritation of this kind ends in confirmed disease.

Inflammation of the stomach is a frequent result of intemperance. It is usually *chronic* in its character. The degree of inflammation will of course depend on the amount of excitement. In the case of a female under the author's inspection, who drank largely of ardent spirits, the stomach was covered with intensely dark patches, exhibiting a high degree of inflammation. Mr. Cook relates a case of *acute* inflammation of the stomach after poisoning by alcoholic liquors, in which "the internal coat of the stomach was inflamed in patches, as also the internal and external coat of the intestines."*

An ulcerated or softened state of the stomach usually succeeds inflammation. Dr. Charles A. Lee thus describes this condition, "*The mucous coat is often almost entirely destroyed; a mere softened pulpy shred remaining, which may be removed with the finger nail with great facility. The inner surface generally presents a dark mottled appearance, the colour varying from a dark brown or livid, to a florid red. In some instances, it is of deep red or almost purple colour; but in others, it is of an ashy paleness, the blood-vessels having been apparently corroded and destroyed by the alcohol. In a case of a drunkard, whom we lately examined, we found not only the mucous, but also the muscular coat nearly destroyed; its texture being completely broken down, presenting a soft pulpy mass, in which muscular fibres could not be detected. On rubbing the inner surface of the stomach gently with the end of the finger, nothing seemed to remain but the thin membranous peritoneal coat, not thicker than the thinnest letter paper.*"† Professor Francis remarks, that the stomach, though armed with vast conservative powers, is compelled at length to surrender to so efficient a conqueror as alcohol. Its sufferings though severe are too often unheeded. Its most conspicuous changes upon inspection are the conditions of *the mucous or villous coat; softened or removed by absorption in its*

greater or cardiac extremity, while nearer its smaller or *pyloric portion*, this membrane in a majority of cases is *thickened*, of a slaty colour, with its surface uneven or nipped, the results of chronic irritation. In other instances *the mucous coat is seen studded with highly-coloured appearances of vascular fulness.*"* Dr. Farre remarks, that spirituous liquors "*destroy the villous coat of the lining membrane of the stomach and intestines, so that death is inevitable.*"†

A thickened state of the coats of the stomach, which sometimes terminates in schirrus or cancer, is not unfrequently the result of alcoholic indulgence. Dr. Hodgkin remarks, that he has often found the membrane lining the stomachs of free-drinkers, thickened far beyond what was natural or healthy.‡ In a case which came under the observation of Dr. Ogston, "The whole of the stomach was found to be firm, and the coats thickened to at least three times their usual size."|| An intelligent physician relates the following interesting case:—"A middle-aged gentleman of wealth and standing, had long been accustomed to mingle in the convivial circle, and though *by no means a drunkard*, had indulged at times in the use of his old Cogniac with an unsparing hand. He was at length seized with pain in the region of his stomach, and a vomiting of his food an hour or two after he had taken it. In about eighteen months he died, in a state of extreme emaciation. On opening the body after death, *the walls of the whole of the right extremity of the stomach were found in a schirrous and cancerous condition, and thickened to the extent of two inches. The cavity of the organ was so far obliterated as scarcely to admit the passage of a probe from the left to the right extremity, and the opening which remained was so unequal and irregular, as to render it evident that but little of the nourishment he had received could have passed the lower orifice of the stomach for many months.*"§

Dr. Charles A. Lee, in speaking of the influence of distilled liquors on the stomach, says,—“Where fermented drinks have been chiefly used, the local ravages will not be found so extensive; but the consequences to the system generally, are no less deleterious and fatal. In these cases, the *mucous membrane of the stomach may even be found thickened.*”¶ Dr. Maenish remarks, that the stomach is apt to get indurated, from long-continued slow action going on within its substance. *This disease is extremely insidious, frequently proceeding great lengths before it is discovered.* The organ is often thickened to half an inch, or

* Bacchus, American Ed., p. 470, Appendix.

† Parl. Evid. p. 102.

‡ Hodgkin's Lectures on Health, 1835, p. 152.

|| Ogston on Intoxication—Edinb. Med. and Surg. Journal, vol. p. 292.

§ An Address by a Physician, on the Effects of Ardent Spirits, &c., p. 5.

¶ Bacchus, American Ed. p. 464.

* Cooke on Nervous Diseases, vol. i. p. 219.

† Bacchus, American Ed., p. 464. Appendix.

even an inch; and *its different tunics so matted together, that they cannot be separated*. The pyloric orifice becomes, in many cases, contracted. The cardiac may suffer the same disorganization, and so may the œsophagus; but these are less common, and, it must be admitted, more rapidly fatal. *When the stomach is much thickened, it may sometimes be felt like a hard ball below the left ribs*. At this point there is also a dull uneasy pain, which is augmented upon pressure.*

Another injurious effect of alcoholic liquors arises from the circumstance, that they unnaturally accelerate the process of digestion; and partially prevent those important and effectual changes which are necessary to the complete conversion of food into nutriment. The importance of a due detention of food in the stomach has been remarked from an early period. An old author, cited by Sir J. Sinclair, in a work originally written in Latin, A.D. 1648, remarks, that wine should not be taken habitually after meals, because it unnaturally accelerates digestion, propels the food before it is properly digested, and lays the foundation of obstructions and putridity.† Dr. Cheyne and Dr. Thackrah make similar observations. “’Tis true,” remarks the former, “*strong liquors by their heat and stimulation on the organs of concoction, by increasing the velocity of the motion of the fluids, and thereby quickening the other animal functions, will carry off the load that lies upon the stomach with more present cheerfulness; yet besides the future damages of such a quantity of wine to the stomach and to the fluids, by its heat and inflammation, the food is hurried into the habit, unconcocted, and lays a foundation for a fever, a fit of the cholic, or some chronical disease.*”‡ “*The detention of food,*” observes Dr. Thackrah, “*is necessary to digestion. The gastric juice does not decompose substances, like the galvanic aura. Its operations are gradual: by the contractions of the muscular coat it is applied to successive portions of aliment. All articles, therefore, which by their stimulus produce a rapid action, are injurious. To this, I attribute the circumstance of bitters frequently impairing the digestive process. They habituate the stomach to propel its contents, before these have undergone the action of the solvent fluid. This observation applies, of course, to bitters taken with food, as the hop in ale and porter.*”

The use of alcoholic stimulants excites an unnatural desire for improper dietetic indulgence, and thus in several ways lays the foundation for various forms of indigestion, impairing, to a considerable degree, the QUALITY and QUANTITY of those natural

secretions, as for example, the gastric juice, without the aid of which, nutrition cannot be effectively carried on and perfected. This valuable and essential fluid is secreted from the mouths of certain vessels on the lining membrane of the stomach. By a necessary and beautiful adaptation of the Creator, it operates *on dead matter only*, and will dissolve substances of the most inflexible, and impenetrable nature. The gastric juice which remains in the stomach *after death*, has been found to ulcerate and perforate its coats. During life, these coats were impregnable to the operations of this powerful fluid. Of this fact, several well authenticated cases are on record.

The most important feature, in regard to the gastric secretion, is the fact, that it always bears a DIRECT RELATION TO THE QUANTITY OF ALIMENT NATURALLY REQUIRED BY THE SYSTEM. Food swallowed in greater proportion than nature requires, becomes a painful source of general, as well as local, irritation. A greater or less quantity remains, for which there is not a sufficient amount of gastric juice to dissolve. This undigested matter then becomes more or less subject to chemical laws, and a process analogous to incipient putrefaction, necessarily takes place.

One common cause of free indulgence in food, is the erroneous supposition that the greater the quantity of food swallowed, and the stronger its nature, the more nourishment does the body acquire, and consequently the more strength. The law of the gastric secretion stated above, decisively refutes this prevalent notion. Tryon observes, that many persons suffer “*through a false opinion or misunderstanding of nature, childishly imagining that the richer the food is, and the more they can cram into their bellies, the more they shall be strengthened thereby; but experience shows to the contrary, for are not such people as accustom themselves to the rich compounded foods, and most cordial drinks, generally the most infirm and diseased?*”* Nutriment taken up into the system in greater quantities than nature requires, produces disease rather than strength, and lays the foundation for numerous bodily ailments. The indications of an appetite, uninfluenced by artificial stimulants, form the only safe guidance in respect to food, and those persons who forsake this unerring guide, subject themselves to all the evils of a morbid appetite.

The quality of the gastric juice, and its consequent fitness for the purposes of digestion, may be supposed to be materially influenced by any cause which disturbs the operations of the stomach, and prevents healthy nutrition. Dr. Beaumont, in his experiments on St. Martin, made some very interesting observations in illustration. When a feverish state of the system had

* Anatomy of Drunkenness, p. 137.

† Sinclair's Rules to Prolong Life, vol. ii. p. 6.

‡ Essay on Health and Long Life, by George Cheyne, M.D., F.R.S., 9th ed. pp. 48-9.

* Way to health, &c., p. 56.

been induced, either by overloading the stomach, or by such improper excitement as arises from the use of stimulating liquors, *the villous coat of the stomach became sometimes red and dry, and at other times pale and moist, and lost altogether its smooth and healthy appearance.* A vitiated, impaired, or entirely suppressed state of the usual secretions ensued. The follicles, or mouths of the vessels, from which the mucus which lubricates and protects the villous coat, is poured out, became flat and vaccid, and no longer yielded their bland secretion; and the numerous minute terminations, or papillæ of the nerves and vessels, were thus subjected to unnatural irritation. If these appearances of disease were considerable, the system sympathised, as was evidenced by dryness of the mouth, thirst, quickened pulse, &c., and what was still more remarkable and important in a dietetic point of view, *no gastric juice could be procured or extracted, even on the application of the usual stimulus of food.** The dry and irritated state of the villous coat of the stomach, together with the cessation of the gastric secretion, easily accounts for the nausea, uneasiness of the stomach, and loss of appetite, which invariably follow after vinous indulgence. Hence is seen the great danger of continuing to use stimulants as a means of obtaining relief for distressing feelings, originally and entirely produced by the use of improper articles, and which only can be effectually removed by *rigid abstinence from the cause of irritation.*

"Vinous liquor," observes Dr. Beddoes, "acts as a two-edged sword. By its first operation it increases that indigestion, of which it has already so largely contributed to lay the foundation. Its second is little less pernicious to the enfeebled viscera. This depends on the change into vinegar, which wine, *however genuine*, undergoes. Vinegar taken frequently and freely, we know to be destructive to the stomach. Indeed, were a person who is hourly reminded that he carries such a debilitated organ under his belt, to be offered ready made vinegar, the idea would go near to bring on a fit of stomach-eramp. Yet he may be assured that the wine he drinks, not only attacks the coats of the stomach as wine, but that it afterwards returns to the charge in an acidified form; and not only so, but it assists in turning sour the vegetable portion of the meat upon which it is poured."† After still further describing the injuries thus effected, Dr. Beddoes remarks, "A very great proportion even of the *moderate drinkers* of our stronger fermented liquors, experience some of these evils," and then comments on the evils consequent on dyspeptics taking "one or two glasses of wine," which practice, although it affords

temporary relief, is productive of serious results. The same writer declaims in strong terms on the "mischief which ensues from wine taken constantly in moderate quantity."* Dr. A. T. Thomson observes, "The unremitting indulgence in the use of malt liquor, among the poor and the middle ranks, *to a degree, even amongst the most temperate, bordering on excess*, is a universal cause of *dyspepsia*, and of many other diseases. *Wine, even in moderation*, when *daily used*, is *equally hurtful*; it over stimulates, and consequently exhausts the powers of life."†

The habitual use of ardent spirits by the poor, has rendered dyspepsia, a disease formerly entirely unknown to that class, a disorder of frequent occurrence. Dr. Gordon remarks, "Dyspepsia has become the common disease of the poorer classes, produced entirely by the practice of *sipping constantly and habitually small quantities of spirits.*"‡ Dr. Dods, makes a similar remark, that indigestion which was formerly considered to be the disease of the rich, has been very much on the increase among the poor, from the use of ardent spirits.|| The author can bear testimony to this fact, from his long residence in the most dense district of the metropolis of manufactures. Indigestion has now become one of the most severe scourges of the working class. The cause of this extension of disease undoubtedly is the common and moderate use of spirituous liquors, combined of course with those other causes of bodily ailment, which peculiarly appertain to residence in densely populated localities.

Spirituous liquors do not aid digestion.—The following most interesting experiment, made by Dr. Beddoes, is in point.—"An equal quantity of the same food was given to two young dogs of the same litter; immediately after feeding, three drachms of the spirit of wine of commerce, mixed with a single drachm of water, were poured down the throat of one of the animals. In five hours both were opened, within a very few minutes of each other. The animal to which the spirit was given, had its stomach nearly twice as full as its fellow. The bits of flesh were as angular as immediately after they were cut off by the knife, at the time of feeding. They were also as firm in their substance. In the other dog, these angles were rounded off, and the pieces throughout much softer. Strong liquors are often equally productive of indigestion in man. Many hours, and even a whole night, after a debauch in wine, it is common enough to reject a part, or the whole, of a dinner undigested." This fact is well known among drunkards, whose undigested food is often seen on the pathway in our streets, to the disgust of all sober witnesses. Dr. Weikard

* Physiology of Digestion, by Andrew Combe, M.D.

† Hygeia, Essay viii. vol. ii.

* Hygeia, Essay. viii. vol. ii.

† Domestic Management of the Sick Room. By A. T. Thomson, M.D., F.L.S., p. 17.

‡ Parl. Evid. p. 196.

|| Ibid p. 221.

also asserts, that wine prevents aliments dissolving, and renders them hard and difficult of digestion.

Alcoholic drinks diminish the healthy appetite. “*Water-drinkers,*” remarks Hippocrates, “*have generally keen appetites;*” “*Hunger is abated by a glass of wine.*”* Inebriating liquors not only blunt the sensibility of the stomach, and thus render it unsusceptible of healthy impressions, but a few hours after a debauch, induce nausea, thirst, febrile excitement, and indifference about food. “Great drinkers of wine,” remarks Dr. Henderson, “it is well known, are in general small eaters, and usually terminate their career with entire loss of appetite.”† The following striking illustration is related by Miss Seward.—This well known writer, met with a family of poor children, whose pale faces and emaciated bodies forcibly attracted her attention. Upon inquiry of the mother how they were fed, she was informed, “that they did not eat much, and that what they did eat was not sufficient to nourish them without gin and water.” It proved, indeed, to be scanty vegetable fare. Miss Seward, after stating to the woman the pernicious effects likely to follow from such a regimen, advised her to purchase a little animal food with the money she expended in gin, and to give the children water to drink with their meals. “Bless you, madam,” replied the poor woman, “if I was to do that, I should never be able to satisfy them in these hard times, I was used to give them water, but they were always hungry, and I could not beg or buy victuals enough for them.”

Depraved appetite is not uncommonly produced by long continued intemperance. Inebriates afflicted with this disease, eat and drink loathsome and injurious substances.

IV. *The intestines, pancreas, spleen, and their functions.*—The functions of the bowels, although not so immediately injured by the use of intoxicating liquors, as those of the stomach, do not by any means escape from serious, and often fatal, derangement. Among these consequences, may be enumerated, *irritation and inflammation of their mucous, or lining, membrane, schirrus, and loss of their natural power in removing the useless matter which remains after digestion has been completed.* Dr. Trotter, in speaking of the schirrous state of the stomach and adjacent organs, thus remarks:—“*The intestines, pancreas, spleen, and perhaps the kidneys, are also liable to the same affection; all of which, after a certain time, are incurable, and often speedily fatal.*” The dram and purl drinker may sooner experience these evils than other drunkards; but *even the guzzler of small-beer has no security against them.* Nay, so sure and uniform is this effect of producing diseased bowels, by

fermented liquors, that in distilleries and breweries, where hogs and poultry are fed on the sediments of barrels, their livers and other viscera are observed to be enlarged and hardened, like those of the human body; and were these animals not killed at a certain period, their flesh would be unfit to eat, and their bodies become emaciated.”* “*The intestines,*” observes Dr. Hodgkin, “do not appear to suffer so much mischief from the drinking of spirits as the stomach; a large portion of the fluid being removed from the stomach by absorption. They do not, however, escape with impunity; *the lower bowels in particular, are apt to become diseased in a secondary way; as for want of a supply of mucus, the fecal matter is too long retained, and the worst consequences often ensue.*”† In the case related by Mr. Cooke, and previously quoted, the external and internal coats of the intestines of a man, who was poisoned by the use of ardent spirits, were inflamed in patches.‡ Constipation, a common consequence of intemperance, is not only productive of serious distress, but often attended with fatal results.

The constipation of drunkards arises from a variety of causes. In some it originates in a deficiency of bile. In others it may arise from that weakness of the muscular coat of the intestines, and consequently diminished peristaltic motion, which is directly produced by the use of strong drink. A torpid state of the lacteals on the surface of the intestines, by which diarrhoea is produced, is another source of constipation; and the lack of mucus, the secretion which lubricates the bowels and enables the fecal matter to pass along with ease, produces similar results. All of these conditions are induced by the free use of inebriating drinks.

The most common consequences of intemperance, however, to the intestinal canal, are those diseases of its mucous, or lining membrane, which are the prolific offspring of insufficient or improper food, and indulgence in strong drink. Examples have already been adduced among our soldiers in the East and West Indies. Similiar illustrations may be found in the hospital reports of our own country, in particular in those districts where ardent spirits are in general use. These reports abound with diseases of the organs of digestion, and in particular of the intestinal canal. “*Cholera,*” says the report of one hospital in Dublin, “is a disease very familiar to the poor, and with them generally succeeding violent fits of intoxication.”|| At Ennis, also, in Ireland, in which place the people are described as “prone to inebriety,” it is stated, that “*hepatic and other visceral inflammations, dysentery,*

* Hipp. Sect. ii. Aphor. 21. p. 1245.

† History of Modern Wines.

* Essay on Drunkenness, p. 128.

† Lectures on the Means of Promoting and Preserving Health, p. 152.

‡ Cooke on Nervous Diseases, vol. i. p. 219.

|| Rep. Sick Poor Inst., Dublin, 1811, p. 19.

cholera morbus, and *diarrhæas*, are prevalent."* These quotations are selected from numerous others, containing ample details of the same description. The reports of hospitals in England and Scotland, present the same results, in proportion to the prevalence of intemperance. Dr. Dods remarks, that "*diarrhæa* has, during the last five or ten years, been both more *common* and more *severe*," and adds, "the habitual use of stimulants, more than any thing else, favours the occurrence of such derangement in the system."† This observation is confirmed by the experience of every hospital physician.

Professor Francis remarks, that "the *spleen* and *pancreas* are deeply affected by long-continued hard drinking. The last mentioned organ is in some cases found to be *schirrous*: the spleen is not unfrequently in a state of *turgescence*. In one subject I found it *augmented to three times the common size*; its *structure* is now and then *extremely soft and yielding*, or what is termed *grumous*."‡ A medical friend of the author informs him of one case of a drunkard, in which the spleen weighed not less than two pounds fourteen ounces. The spleen in its natural state weighs from about eight to ten ounces.

V. *The liver and its functions*.—Derangement and disease of the liver are among the most frequent consequences of indulgence in strong drink. This important organ is affected in various ways. *Acute inflammation* often follows continued intemperance. *Chronic*, or slow inflammation, however, is a more common consequence of vinous indulgence. "The inflammation of drunkenness," remarks Dr. M'Nish, "is, in a great majority of cases, chronic, and the viscus which, in nine cases out of ten, suffers, is the liver."||

Alcoholic stimulants act in two ways, upon this viscus; viz., 1st, by sympathy with the diseased mucous lining of the stomach; and, 2nd, by the direct irritation of alcohol, with which it comes in contact through the medium of the circulation.

The mucous membrane of the liver is a continuation of that which lines the stomach; disease, therefore, of the latter organ necessarily exercises a greater or less influence on the former. The secretion of the liver is derived from the *venous*, or black blood, all of which has to pass through that viscus. It is thus easy to perceive how its structure may be *directly* injured by intoxicating stimulants. In whichever of these ways alcohol may operate, it is certain, that the actual cause of disease is the unnatural excitement which it invariably produces.

The liver appears naturally to be endowed with strong powers of resistance, and withstands the attacks of disease much better than

most other organs. Structural derangement, however, may be going on to a serious extent in this important viscus, without, in many instances, being discovered. "*The chronic species*," remarks Dr. Trotter, "*is not a painful disease; it is slow in its progress, and frequently gives no alarm, till some incurable affection is the consequence*."*

Dr. Gordon remarks that "there would be nothing new in the observation that a large quantity of spirits, taken habitually, would produce diseased liver, but his observation tends to this, that even among people of moral and religious habits, he has been struck with observing the universality of the fact, that *even where they were in the habit of taking one or two glasses of spirits and water, and not drinking anything else, disease of the liver occurred as the result*."†

Dr. Gordon strengthens this remark as follows:—"As a hospital physician, I have the power of observing daily that the much smaller consumption of spirits, *that habitual sipping and toping*, which takes place in the gin-shops, *produces diseases no less fatal and destructive than drunkenness*;" and again "the frequent consumption of a *small quantity of spirits, gradually increased, is as surely destructive of life as more habitual intoxication*."‡

The liver is naturally of a dull brownish colour. By vinous indulgence, however, it assumes a granular appearance. In this state it has been compared to the cut surface of a nutmeg. The nutmeg liver is familiar to most medical men. Dr. Hodgkin, remarks, that *he has seen it in a state resembling wet saw-dust, and composed of a fat and pale substance*.|| Dr. T. H. Burgess, of London, not long ago made a *post mortem* examination of a person who had, for a considerable period, been accustomed to indulge immoderately in the use of ardent spirits. "*The liver*," he states, "*was friable when touched, and almost tumbled to pieces in the hand*."

Topers commonly taunt each other with being "*white livered*," a phrase perfectly familiar to that class of society.

Enlargement of the liver is a very common result of intemperance: sometimes even to double its natural extent, accompanied very generally, with almost complete disorganization of its structure. The author of the small Essay which has been previously quoted, states, that he has met with several cases in which the liver had become enlarged from intemperance, so as to occupy a great part of the cavity of the abdomen, weighing from eight to twelve pounds, when it should not have weighed more than four or five.§ The effects of ardent spirits in increasing the bulk of the liver, have been observed in other animals besides man. London fowl-dealers, are said to mix gin with the food of

* Rep. of Board of Health, Dublin, 1822, pp. 123, 124.

† Parl. Evid. p. 224.

‡ Bacchus, American Ed. p. 170, Appendix.

§ Anatomy of Drunkenness. p. 133.

* Essay on Drunkenness, p. 124.

† Parl. Evid. p. 197. 1 Ibid. pp. 157—8.

Lectures on Health. p. 152.

§ Address by a Physician, p. 5.

birds, by which means their livers are swelled to a great size.*

Mr. Upton, of London, informs us that when in Edinburgh, in 1784, when spirituous liquors were more generally drunk in Scotland, he “witnessed the fatal consequences in the infirmary there, by an *enlargement of the liver to an extent almost unprecedented in this country; its figure could be distinctly traced on the parietes of the abdomen*, with a pencil; the other contents of the belly being pressed down into the pelvis by its magnitude; always proving fatal, and the instances very numerous indeed.”†

Dr. C. A. Lee states, that he has “usually found the liver of inebriates *enormously enlarged*. He has met with instances where the liver has weighed over twelve pounds, though it is sometimes shrivelled to dimensions smaller than natural. In such cases it is usually *tuberculated and hard*. Its tissue is also very often softened, so that the mass can easily be broken down with the finger.”‡

“Intemperance,” remarks Professor Francis, “exercises a singularly direct and potent influence on the liver. The researches of the pathologist have led him to describe several striking alterations in this viscus; of all the abdominal organs perhaps it suffers most; and hence the despondency so often consequent upon the vice of hard drinking. The liver may become, by habitual intoxication, *preternaturally hard or schirrous*; it may be *studded with tubercles*, and these may be, more or less, *deep-seated in its texture*, or superficial, with or without *suppuration*: its whole structure may also be changed: it may be obstructed and become *extraordinarily enlarged*; and it is worthy of remark, that the inordinate plethora of the blood-vessels, which so generally accompanies excess in eating and hard drinking, here evinces its detrimental influence in the most palpable manner. I once asked old Mr. Fife, the anatomist at Edinburgh, who was many years dissector at the university, *how great was the largest sized liver he had ever encountered*, in his preparations of dead bodies for collegiate purposes? He answered *fifty pounds!* and this occurred in the person of an inebriate who had long lived in the East Indies. When we consider that the ordinary weight of this viscus may vary in a healthy state, from four to seven, or eight or nine pounds, it might have been inferred that such a formidable liver would have created bile enough for a whole army; yet this man died with a deficiency of this secretion. The livers of those who abuse their constitutions by alcohol are, however, generally *preternaturally diminished, of a pale, straw colour, with few traces of blood-vessels, and in a hardened or indurated state*; this contracted state

doubtless follows the enlarged condition usually the result of long continued disease in this organ. Sometimes *excessive indulgence in fermented drinks, will augment the size of this gland to an enormous extent*; thus at least I have found it in a limited number of dissections.”*

Dr. Farre states that ardent spirit “destroys the gastro-hepatic system, producing a variety of liver diseases, as *inflammation*, especially the *chronic hepatitis*, what Baillie termed the *small white tubercle* of the liver, also *cancerous affections*, as the *large fungus* of the liver, and completely *obliterates the fine structure* of that important organ.”†

Enlargement of the liver, however, is not an invariable consequence of intemperance; on the contrary, the bulk of this important organ is sometimes considerably diminished by the free use of strong drink. Its structure, at the same time is, in some cases, so disorganized as to acquire a most remarkable solidity.

The liver of the late George Frederic Cooke, an individual notorious for his partiality to the bottle, as well as for his extraordinary powers of dramatic representation, was so disorganized by strong drink as to be remarkably solid in its texture.

Dr. Hosack, on making a *post mortem* examination of this viscus found that it was of a lighter colour than natural, and did not exceed its usual size, but was so exceedingly hard and dense as to make considerable resistance to the knife. The regular circulation of the blood through the liver had evidently long ceased, and tubercles were found throughout its whole substance, and the numerous blood vessels which had formerly been in active and healthy operation, had become nearly obliterated. The physician before quoted, states that he had met with several cases in the course of his dissections, in which the liver was found smaller than natural, shrivelled, indurated, its blood vessels diminished in size and number, with the whole of its internal structure more or less changed,‡

One of the first and most prominent consequences of these vital changes, is a defective secretion of the bile, both in regard to its quantity and quality. From thence arises imperfect digestion. Torpidity of the bowels is induced principally by the absence of proper and efficient bile. This fluid may be considered as their natural stimulus.

Icterus, or *jaundice*, is another state of the system frequently produced by intemperance, and intimately connected with the functions of the liver. It arises in fact from organic obstruction in this organ. “White livers,” usually, yield little or no bile, but when they do so the biliary ducts and vessels are obstructed, and the liver returns

* Anatomy of Drunkenness, p. 134.

† Parl. Evid., p. 424, Appendix.

‡ Bacchus. American Edit. p. 464. Appendix.

* Bacchus, American Ed., pp. 470—1. Appendix.

† Parl. Evid., p. 102, Appendix.

‡ Address by a Physician. p. 6.

blood mixed with bile to the heart, where it is distributed through the whole system, and produces that sickly and yellow appearance which is often spoken of as being, "as yellow as a guinea." "The drunkard," observes Dr. Trotter, "should be taught to look into a glass, that he may spy the changes in his countenance; the first stage would present him with redness of eyes; the second, would exhibit the carbuncled nose; and the third, a yellow and black jaundice."* "I have," remarks the same physician, "at present a patient just recovering from diseased liver and jaundice, who, by giving up the vinous stimulus at once, has been miraculously snatched from the verge of the grave."†

Dr. Saunders asserts, in his "Treatise on Diseases of the liver," that, in many cases, the abuse of vinous spirit disposes to jaundice of the most unfavourable kind, because generally accompanied with a diseased structure of the liver; and that the stomachs of persons who have died under the habit of drinking drams have, on dissection, generally been found in a flabby and inelastic state, capable of secreting only diseased fluids. This loss of tone in the stomach is often accompanied by tremors, heat, and a propensity to palsy, loss of memory," &c. He also correctly remarks, that "diminished secretion of bile is attended by indigestion, flatulent eructations, &c. The quantity of food taken at one meal should be moderate, and water should be the only liquid drank with such meals, as more effectually promoting digestion, than fermented liquors of any kind."

Disorders of the biliary ducts arise even from the moderate use of wine. The following interesting case is in point. "Nearly three months ago," remarks Dr. Cheyne, "a gentleman, far advanced in years, came to Dublin to obtain relief from a painful affection of the biliary ducts, under which he had been suffering for nearly a year. He considered himself temperate in wine, of which, I believe, he seldom exceeded a pint after dinner; before he left the country, he was ordered to take not more than three or four glasses of wine in the day. This gentleman came under my care, and shortly after, he had an attack of the palsy, one side of his body becoming nearly insensible and powerless. I took the opportunity of withdrawing from him every description of fermented liquor, limiting him to aqueous drinks. Under this regimen, to which, being a man of strong resolution, he cheerfully submitted, in four or five weeks he nearly recovered the use of his paralyzed limbs, and, what was not to be expected, at his advanced age, he recovered flesh. I heard this day (October 16th) that he has had no return of the pain since he ceased to take wine."*

VI. *The heart, blood-vessels, and their functions.*—Diseases of the organs of circulation, from indulgence in strong drink, are of much more frequent occurrence than is generally supposed. The heart, which forms the centre of circulation, is peculiarly subject to undue excitement. *Dilatation of its chambers* is a common result of intemperance. *Excessive palpitations* of that important viscus, are also, of frequent occurrence. This distressing complaint is generally accompanied with most painful sensations, and alarming symptoms. In a state of health the natural action of the heart ought steadily to go on without any sensible consciousness of its operations. The presence, however, of a stimulating ingredient in the blood, and its repeated application, produces a state of unnatural excitement in its functions, which is distinctly and painfully evidenced to the unfortunate sufferer. Great difficulty of breathing, and determination of blood to the head, accompanied, of course, with *accelerated pulsation*, form its most prominent and characteristic symptoms. This state not unfrequently terminates in a *thickening of the lining membrane of the heart*, in addition to *ossification of its elastic valves*, or in other words, their *conversion into a bony substance*. Hence the blood cannot circulate with its usual freedom, and on occasions of great excitement, when a rush of the blood takes place to these valves or gateways, its progress is impeded, and sudden death is not unfrequently the inevitable consequence. The arteries, both large and small, in intemperate persons, are also subject to ossification.

Morgagni, in a great variety of dissections of drunkards, discovered dropsy of the *pericardium*, *ossification of the valves of the heart*, *coronary arteries*, and even the *aorta* itself.* The arteries of the brain also exhibited the same osseous depositions. The trunks of the arteries in the meninges, together with their branches, which extend to the *plexus choroides*, were much thicker and harder than natural, and when dried, they exhibited deposits of bony substance in different places. *Sed in tenui meningi arteriarum, trunci omnes, omnesque item earum rami, iique presertim, qui versus plexum choroidem contendunt, multo erant crassiores aequo, et duriores, exsiccataque osseam pluribus in locis naturam ostenderunt.*† Dr. Trotter, in reference to these conditions, observes, "the patient commonly dies suddenly at last, after being long tormented with anxiety of the most distressing kind, frequent fainting fits, fearful dreams, that make him start from his sleep with signs of the utmost terror and agitation, and great dejection of spirits. To these may be added those symptoms which constitute the "*angina pectoris*" of some authors. The subjects of these horrid complaints seem to undergo every hour, all

* Essay on Drunkenness. p. 129. † Ibid. p. 130.

* A Second Letter on the Effects of Wine and Spirits. p. 8. 1830

† Morgagni's De Causis et Sedibus Morborum. Lib. ii. Epist. xxvi. 13, 37. Epist. xxviii.

* Ibid. Lib. ii. Epist. xxvii. 28.

the pangs of dissolution.”* They rank, he adds, among the most fatal and terrible evils of the gloomy catalogue of diseases which arise from drunkenness.

Professor Francis remarks, “Others as well as myself, have found the *heart unusually enlarged*, and its *valves so diseased*, as to occasion serious obstruction to the circulation of the blood. The hypertrophy of this important organ, and the condition of its valves, will account for the sudden death of some alcoholic martyrs.”† Dr. Dods, speaking of the increase of intemperance, says, “disease of the heart and blood-vessels was of comparatively rare occurrence, but is now extremely common. The effects of alcohol on the blood-vessels seems to be two-fold, *increased excitement*, and *contraction of the diameter of the vessels*; this tends to produce *enlargement in some parts of the blood-vessels*, or *effusion*, should their coats give way at any part of their course; diseased deposits are frequently formed where a branch is given off, or in some of the wider portions of the blood-vessels, which give rise to most painful symptoms, such as are common in gout and rheumatism.”‡ Enlarging upon these phenomena, Dr. Dods exclaims, “Many lamentable specimens of morbid deposits are furnished by habits of intemperance, and many ‘wearisome days and restless nights,’ become the purchase of such thoughtless indulgence.”||

Dr. Percy cites the case [drawn up by Dr. J. Reid] of a man, æt. 40, who was an habitual drunkard, and who at last died after a drunken debauch, in the Edinburgh infirmary. On a post mortem examination, among other evidences of disease, “the inner surface of the thoracic aorta presented a tuberculated appearance, proceeding in some places to the deposition of calcareous matter.”§

The injurious consequences of vinous indulgence on the circulation, however, are most palpably evidenced in the important changes which it effects on the blood itself. The blood of the drunkard is much darker than natural, having lost its red or arterial properties, and contains a large quantity of serum. It approaches, in fact, as near as possible to the character of venous blood. It is thus deprived of some of its most valuable qualities. In this condition the circulation is slow and languid. The blood moreover is incapable of affording that *natural stimulus to the vessels*, which it possessed in a state of health; and the entire system is characterized by loss of tone and energy, productive of irregular and sluggish action. In this state of morbid debility, the system is necessarily rendered liable to disease and dissolution.

The experiments performed by Mr. Brodie, illustrate the pernicious influence of alcohol on the blood. Dr. Percy’s experiments led to similar results. In every case in which the animals were poisoned by alcohol, the blood was *dark*, and *consequently unfit for nutrition*. In one case, “the blood in all the cavities of the heart was dark, and *became red on exposure to the air*. The great veins were fully distended with dark blood.”* In another, on cutting through the right temporal muscle, a quantity of *dark fluid blood* oozed out. *Dark coloured and perfectly fluid blood* was contained in all the cavities of the heart.† The blood also in the vessels of the man whose case is related in the last Section, and who was poisoned by alcohol, presented the same appearance.—The lungs were gorged, posteriorly with dark coloured blood—the right ventricle and auricle of the heart, with the vena ascendens and descendens, were also distended with *dark-coloured fluid blood*. The vessels on the surface of the brain exhibited the same phenomena.‡

These illustrations are perfectly conclusive. With such blood, life soon becomes extinct. Dr. Macnish correctly remarks, that the blood of those who drink malt liquors, is not merely darker, but more thick and sizzly than in other cases.||

Dr. Trotter informs us, that in the sea scurvy, a disease where, in the advanced stage, the blood is always found of a very dark colour, spirituous liquors more than anything else, have a manifest tendency to aggravate every symptom. This fact often came under his observation.§ The reason is obvious.

The languid circulation consequent on the presence of black or dark coloured blood in the arterial vessels, is a subject of vital importance. The contact of red or arterial blood, is as necessary to the healthy action of these blood-vessels, as pure air is essential to agreeable respiration, or nutritious food requisite to healthy digestion. Such blood is, in the strict sense of the word, the natural stimulus of these vessels, and alone excites them properly to perform their peculiar duties. Alcoholic drinks, therefore, in obstructing the essential functions of respiration, prevent due assimilation, and expose the system to numerous physical evils.

The following cases show that *immediate death by spasmodic affection of the heart*, is produced by intemperance. A large athletic man, long accustomed to the use of ardent spirit, on drinking a glass of raw whiskey, dropped instantly dead. On the body being carefully dissected, no adequate cause of the sudden cessation of life

* Essay on Drunkenness. pp. 135—6.

† Bacchus, American Ed. p. 470, Appendix.

‡ Parl. Evid. p. 224. || Ibid. p. 225.

§ Register of Dissections of the Royal Infirmary, Edinburgh, vol. iii. p. 164.

* Experimental Inquiry, p. 89.

† Ibid. p. 65. ‡ Ibid. pp. 47-8.

|| Anatomy of Drunkenness, p. 143.

§ Essay on Drunkenness, p. 69. Diseases of the Fleet, vol. i. p. 110.

could be found in any part, except the heart. This organ proved to be free from blood, and was hard and firmly contracted, as if affected by spasm. "I am convinced," adds the intelligent physician who relates this case, "that many of those cases of sudden death, which take place with intemperate persons, are the result of spasmodic action of the heart, from sympathy with the stomach, or some other part of the system."*

"The heart," observes Mr. Beaumont, "is always sensibly affected when any quantity of stimulating liquors is taken; and on examining the bodies of several who were addicted to drinking, I have observed symptoms of recent inflammation about the valves and great vessels; in one instance, I discovered erythematous inflammation, and ulceration of the inner surface of the thoracic aorta, with induration and thickening of the mitral and semilunar valves of the heart. This was a remarkable case of organic disease about the heart, *and yet where nothing of the kind had been suspected during the life-time of the individual; who was a correct and religious man, and never accused of inebriety.* He was subject, however, to a class of symptoms, which he termed, 'spasms of the stomach,' and for which his good lady always administered, *hot brandy and water*; and, I believe, when he had what he thought premonitory symptoms, which were not unfrequent, the same 'medicine' was resorted to. This gentleman spent an evening with a party, in usual health and excellent spirits: on retiring to bed, he was seized with his old symptoms, and with such effect, that in a few minutes he expired."†

VII. *The lungs and their functions.*—Disease of the organs of respiration, is a frequent consequence of vinous indulgence. The direct application of alcohol, no doubt, occasions considerable irritation of the mucous membrane of the trachea, bronchial vessels, and air cells of the lungs. Alcohol, when conveyed to the lungs through the medium of the circulation, necessarily comes in contact with this highly sensitive membrane, on being exuded on its surface through the exhalent vessels. A troublesome cough and laboured respiration is the inevitable consequence. Continued intemperance terminates in a disorganized state of the mucous membrane and structure of the lungs, frequently preceded by attacks of inflammation, which generally end in fatal consumption. The copious expectoration produced in the first instance, is thrown off from the inflamed surface, and is indicative of the serious amount of injury which is going on.

The lungs are also affected by sympathy with other organs in a diseased condition. The liver and stomach when in a disordered

state, easily affect the lungs, from the intimate and sympathetical relation which subsists between those organs and the function of respiration. This circumstance is familiar to every practitioner in medicine. It is a well known fact, that an irritated state of the lungs is commonly removed by regulating and restoring the healthy functions of the stomach.

"I have met with many cases," remarks the writer before quoted, "in the course of my practice, of cough and difficult breathing, which could be relieved only by regulating the functions of the stomach, and which soon yielded, on the patient ceasing to irritate this organ with ardent spirit. I have found the liver still more frequently the source of this affection; and on restoring that organ to its healthy condition, by laying aside the use of ardent spirit, all the pulmonary symptoms have subsided."*

There is little doubt that if the subject was thoroughly investigated, it would be found that a very large proportion of the cases of pulmonary consumption which occur in this country, originate in the use of intoxicating liquors. Injurious transitions from excitement to depression, doubtless form a powerful predisposing cause of this fearful malady. Hence the delicate and highly susceptible mucous membrane of the lungs, continually labours under irritation and subacute inflammation, which eventually ends in destructive and hereditary disease. The erroneous notions which so generally prevail in regard to the *cold opposing* influence of alcoholic stimulants, is a common cause of this fatal disorder. Spirituous liquors are in consequence used with most freedom at those seasons when the effects of cold require unusual care and attention. The remedy, however, to a dreadful extent, increases the disease!

Professor Francis observes, in reference to the intemperate:—In those of strong predisposition to pulmonary mischief; in habits of a strumous or scrofulous nature, we find *tubercular formations, and the several changes of disordered structure, the result of over wrought action, or inflammation.* Sometimes the lungs may be freed of this oppressed state by *hæmorrhage*, and their texture be released for a season, but the *lesions* thus induced, are only the precursors of *ulcerative action*: in other subjects the previous tubercles secure their disastrous triumphs, by *purulent secretion and death.* *It is surprising, that writers have not more generally adverted to the frequency of pulmonary consumption, as occasioned by hard drinking.* Dr. McLean assures me, he has attended at least fifty cases of fatal consumption of the lungs brought on by intemperance."† Dr. Rush, among other effects of spirituous liquors

* Address by a Physician, p. 7.

† Essay on Alcoholic Drinks, p. 38.

* Address of a Physician, p. 8.

† Bacchus, American Ed., p. 170, Appendix.

enumerates, "hoarseness and a husky cough, which often terminate in consumption, and sometimes in an acute and fatal disease of the lungs."*

The *breath of the drunkard is often characterized by a spirituous odour*, a strong proof of the actual presence of the poison in one of the most important and delicate organs of the human system. The *rapidity with which alcohol comes in contact with the lungs*, is forcibly illustrated by an experiment of Dr. Percy. Half an ounce of alcohol, sp. gr. 850°, was injected into the *left carotid artery* of a full grown spaniel dog. "*In one minute the breath acquired a decidedly alcoholic smell.*"† The breath of the inebriate soon indicates the presence of the poison, by its peculiar odour. This fact exhibits in the strongest possible light, the exertions made by the various organs with which it comes in contact, to dislodge so potent an enemy. The poison is first absorbed from the stomach, then enters the circulation, and traverses the system with rapid speed, until the strenuous efforts made for its expulsion are attended with success. In the meanwhile, general excitement, and in particular *laboured respiration*, evidence its injurious influence. Magendie, in the course of his interesting experiments, found that diluted alcohol, a solution of camphor, and other odorous substances, are taken up by the absorbents, and after mingling in the circulation, pass off by the pulmonary exhalents. In one experiment made by this eminent physiologist, phosphorus, which was injected into the crural vein of a dog, in a few moments evidenced its presence through the nostrils, in the form of a dense white vapour, which he ascertained to be phosphoric acid. Cases of spontaneous or inebriate combustion, are stated to have originated in the contact of a candle with the breath of a drunkard.

The *function of respiration is*, in many respects, *materially interfered with, and impaired by the use of inebriating compounds*. Alcoholic liquors considerably excite and increase the action of respiration. Divers, for example, cannot remain under water for so great a length of time after they have taken ardent spirits, as when they are not under its influence. Mr. Spalding, the celebrated diver, observed, that when he drank spirituous liquors in his diving bell, he consumed the oxygen of the atmosphere in a much shorter space of time than when he abstained from them. He also observed, the same effect to arise from the use of fermented liquors. Mr. Spalding found it necessary on these occasions to restrict himself to the use of simple water alone.

VIII. *The urinary organs and their functions*.—These important organs suffer

severely from habits of intemperance. There is, perhaps, one redeeming quality to be found in their operation upon that particular portion of the animal economy. The secreting power of the kidneys is well known to be powerfully increased by the use of alcoholic liquors; which is, in fact, a fortunate circumstance, as a portion of the stimulating material is, by this means, got rid of. The continual irritation to which these organs of excretion are subjected, gradually effects a change in their structure, which not unfrequently, terminates in death. Dr. Ogston states, that in the post mortem examinations which he made, "*the kidney was found enlarged, softened, and paler than usual, and the bladder thickened and of considerable size.*" In addition to inflammation, and thickening of its coats, *paralysis* and *spasm* of the bladder may be enumerated among the consequences of intemperance. From thence result both an occasional *suppression of urine*, which may end in *confirmed strangury*, and also *incontinence* of that important fluid. One of the most fatal effects of a diseased state of the kidneys, is a permanently morbid and excessively *enlarged secretion of urine*. This morbid secretion is sometimes so large, as to amount to several gallons in the course of a day. In these cases the urine is frequently quite sweet, ferments like beer, and often attracts flies. There is much reason to suppose, that one of the causes of this disorder is to be found in a depraved condition of the digestive organs. Dr. Trotter was of opinion, that many drunkards have this complaint upon them without taking notice of it; and that it comes and goes without creating alarm, as they happen to live regularly or otherwise. When it has once assumed a decided character, however, it frequently baffles medical skill, and sooner or later has a fatal termination.

The formation of *urinary calculi*, is well known to be a frequent consequence of intemperate habits. Dr. Burgess, in the post mortem examination of the drunkard, to which reference has been made (p. 210,) found in the kidneys "about one hundred calculi, or small stones, of the size of a shot." This morbid and painful concretion has, in a previous Section, been sufficiently shown to be closely allied with the free use of intoxicating liquors.

"The venal organs," remarks Professor Francis, "are in some rare examples, partakers of the inconveniences and changes arising from alcohol. From their being summoned to inordinate action, they occasionally take what pathologists have termed a granular degeneration. — Some few years past, I saw an example of great enlargement of the left kidney, which upon being opened, discharged nearly two quarts of purulent secretion. The sufferer had long been accustomed, in secret, to excessive drinking; and his morbid anatomy in divers

* Inquiry into the Effects of Ardent Spirits, by B. Rush, M.D.

† Experimental Inquiry, p. 87.

parts, was a notable display of those ravages of inebriety on the constitution, so familiar to the pathological inquirer. In another drunkard, I witnessed *ischuria* blended with *cerebral symptoms*. He had laboured under *diabetes* some five weeks, and was much exhausted: the diabetic discharge suddenly ceasing, coma supervened, and he lived but a few hours."*

There are several diseased conditions of the kidneys, which are more or less produced or aggravated by the use of alcoholic liquors. Most of these are productive of serious consequences, and greatly contribute to swelling out the fearful list of irrecoverable diseases, originating in the pernicious use of strong drinks. The pathological investigations of Dr. Bright have tended much to elucidate this interesting subject.

The presence of alcohol in the urine has been tested by two accurate experiments, made by Dr. Percy. In one instance, "an appreciable quantity of alcohol was obtained from the urine of a dog, as was proved both by the test of dissolving camphor, and of inflammability."† In another instance Dr. Percy detected alcohol in *human urine*. It was the urine of a man in Edinburgh, a graver-digger, an habitual drunkard, who was at the time in a state of intoxication. He had taken in all (as nearly as could be ascertained) about a bottle of whiskey. The urine was clear and of a pale straw colour. Dr. Percy subjected five fluid ounces to distillation over an argand lamp, and drew over three drams of perfectly colourless and transparent liquid, having a peculiar odour very like that of sweet wort. The product was poured into a small matrass, containing an adequate quantity of sub-carbonate of potass and again distilled. The first drops which came over were examined, and found not to be combustible. He then continued the distillation, and drew over one dram which was put into a test tube, containing sub-carbonate of potass; instantly, on agitation, a perfectly clear and colourless supernatant stratum appeared, *which dissolved camphor and burned with a blue flame*. The examination was repeated in the presence of Professor Traill.‡ These experiments exhibit additional evidence that alcohol permeates the system undecomposed or unchanged by assimilation.

The facts adduced in the present and previous sections, prove the presence of alcohol in the *blood* and *brain*, (pp. 188-90) the *lungs*, (p. 215) and the *urine*, (p. 216) unaltered and unalterable by any living process. In an additional case, a spirituous odour is reported to have been observed in the *pericardium* (or *bag which envelopes the heart*) after rapid poisoning by whiskey.|| In a second individual the odour of æther

was distinct in the same cavity.* What more convincing proof can be advanced of the innutritious and poisonous properties of intoxicating liquors.

IX. *The organs of generation and their functions*.—The sexual passions are roused to an ungovernable extent by the use of strong drink. Its unholy influence soon bursts asunder the restraint of virtue. It is thus that ungarded youth becomes the victim of unlawful gratification.

"She urged him on to fill another cup;
and in the dark, still night,
When God's unsleeping eye alone can see,
He went to her adulterous bed. At morn
I look'd, and saw him not among the youths;
I heard his father mourn, his mother weep;
For none return'd that went with her. The dead
Were in her house." POLLOCK.

The ancient Romans, Massilians, Milesians, and other nations, interdicted wine to their women, lest it should render them lewd and extravagant. Ælian, Athenæus, Valerius Maximus, and Dionysius Halicarnassus, make mention of this fact. The latter, in reference to the law of Romulus on this subject, informs us, that the founder of the Roman Empire looked upon "drunkenness as the grand incentive to lewdness." Reference is not unfrequently made in scripture to the "wine of fornication." In ancient times, aphrodisiac drugs were mixed with wine for this purpose. This subject, however, will be discussed at length in a subsequent Section.

Even the sedateness of age is excited to folly, by the use of inebriating liquor. Dr. Trotter tells us of an old gentleman of 80, who when in his cups, became so amorous, as to take a lamp-post for a lady, and address it with all the language of passion and flattery.†

Loss of sexual appetite, is a common result of continued intemperance. The drunkard, in course of time, loses all natural sexual inclination. He becomes dead to every feeling of love—and in this, as in most other respects, sinks beneath the brute in the scale of animate existence.

Impotence, in general, accompanies the latter diseased or unnatural condition. It may arise from debility of the physical powers, or from paralysis of the muscles employed in sexual intercourse. Lord Kaimes informs us, "that before the use of gin was prohibited, the populace of London were debilitated by it to a degree of losing, in a great measure, the power of procreation."

The *seminal fluid*, like all other secretions of the system, becomes vitiated and depraved. The seminal glands, in drunkards, perform their functions in an imperfect manner, and of course the fluid secreted is unfit for its natural purpose, in proportion to the disease or debility of the organ from which it is

* Bacchus, American Ed., p. 471, Appendix.

† Experimental Inquiry, p. 23.

‡ Bacchus, American Ed., p. 105.

|| Christian on Poisons, 3rd Ed. p. 53.

* Lancet, 1836-7, p. 271,

† Essay on Drunkenness, p. 63.

scerned. Hence, a puny and diseased offspring.

The *uterine functions* suffer in the same way. A depraved state of the system of the maternal parent, renders it impossible for the child to be born with a vigorous and healthy body. Hence, a diseased and debilitated generation.

Sterility is a frequent effect of confirmed intemperance. The children of drunkards are, in general, not numerous. This may be considered as a fortunate circumstance. It arises, of course, from incompetence of the organs of generation.

X. *The absorbent system and its functions.*—The functions of the absorbent system are extremely important. Absorption consists of two kinds, *lacteal* and *lymphatic*. The lacteal absorbents are those vessels on the alimentary canal, which receive nutriment or supplies from without, that is, through the medium of digestion. The lymphatic absorbents, on the contrary, are distributed through all the textures of the human system. Their office is to convey a fluid called *lymph*, collected from the various tissues, to the large veins near the heart, where it mingles with the venous blood. The lacteal absorbents convey the chyle eliminated by digestion to the same centre. The use of spirituous liquors deranges these functions in many respects.

Dropsy is produced by a diseased or imperfect condition of the absorbents. This formidable disorder, however, is usually symptomatic of disease in other organs. It frequently, for example, arises from hepatic disease. The blood is obstructed in the veins, lymph is in consequence thrown out from their extremities, which, in its accumulated state, forms the diseased condition under consideration. The general debility of the system, which is induced by intemperance, forms another not uncommon cause of this distressing disease. Dr. Rush enumerates, among other effects of indulgence in spirituous liquors, dropsy of the belly and limbs, and, finally, of every cavity of the body.

Emaciation is another result of intemperance, and, in particular, of such intemperance as is occasioned by indulgence in ardent spirits. This pernicious habit impairs and destroys the sources of nutrition and health. The conversion of food into healthy chyle is thus prevented or obstructed; and, in many cases, even if the appetite and digestive process are occasionally improved, the vessels by which the nutriment is to be conveyed into the system, are more or less diseased, and thence become inactive and torpid.

Corpulence, or unnatural increase of size, afflicts, in particular, a certain class of drinkers. This disease seldom occurs among grossly intemperate characters. It is in general found among publicans and persons of indolent habits, who indulge freely in

gross meats, in addition to other causes favourable to this morbid state. The blood deposits an unhealthy and superabundant mass of fat through the whole system, but more especially on the omentum and muscles of the abdomen. Hence, the abdominal protuberance for which this class of persons are remarkable. This state is so essentially one of disease, that even when its unfortunate subjects are rapidly sinking through the effects of free living, and all the other parts of the system are in a state of comparative emaciation, the bulky appearance of the abdomen remains.

Shakspeare made this circumstance a subject of remark.—“A decreasing leg, and increasing belly,” are described among other characteristics of long-continued drunkenness.*

It is not unlikely that a considerable portion of this corporeal enlargement arises from a deposition of gaseous and liquid matter into the various interstices of the system. The bloated appearance of the drunkard, renders this hypothesis not improbable.

The corpulence or emaciation, however, of drunkards, in general depends upon derangement of the balance between lacteal and lymphatic absorption. In inebriate emaciation the system is not only deprived of the chief source of nutriment, but has to sustain the drain caused by increased action of the whole functions. The process of absorption exceeds that of nutrition. Existence is mainly sustained by lymphatic absorption, that is, the body feeds upon itself. Having little or no support from without, it is obliged to depend upon its own or inward resources. All this while the organs of excretion convey away a considerable proportion of useless matter. Hence, even when the system does receive some nutriment from without, the supply does not equal the loss, fat becomes absorbed from every part, the plumpness of health disappears, and the body becomes quickly emaciated and feeble. The vital powers are, proportionably, at a low ebb.

The organs of nutrition, on the other hand, in persons of peculiarly vigorous constitution, resist for a considerable length of time the influence of alcohol. The mucus poured out on the villous or lining surface of the stomach sheathes it to a certain extent from harm. In this case the use of alcohol produces a more rapid absorption of nutritious matter. Hence, enormous and unhealthy accumulations of fat from over-nutrition. All drunkards, however, sooner or later become emaciated.

Dr. Farre relates the case of a man, (the fattest he ever witnessed) whom he saw *in articulo mortis*. He was dying of sanguineous apoplexy, the effects of indulgence in gin. On examination after death, the

* King Henry IV. Act. i. Scene 2.

liver was found to be gibbous at its extremity, completely rounded, white within, and its peculiar structure very much obliterated, in fact, nearly completely disorganized. The artery of the dura-mater, or outer membrane of the brain, was blood-shot. Dr. Farre inquired of the man's surgeon, a gentleman on whom he placed reliance, what were his habits; when he ascertained that he was accustomed to drink three or four pints of gin daily. His wife, a very respectable woman, confirmed this statement. She had known him to drink seventy-two glasses of the usual dram at a sitting. This man, as Dr. Farre observes, was fattened, because the absorbent surface of his alimentary canal was not destroyed, as it usually is.* This case, although one of rare occurrence, is of importance in several points of view. It not only shows that corpulence is no criterion of health, but that, on the contrary, when the system outwardly displays signs of health, or at least bodily development, inwardly destructive changes may be effected in important organs. Similar changes take place in corpulent drunkards who do not drink to similar excess.

The unnatural accumulation of fat in drunkards is always the result of diseased action, and exists at the expense of one or more important organs and their functions. In most cases the deposition of fat is accompanied with corresponding loss of muscular substance. A case in point is related in Rust's Journal. The muscular substance was converted into fat, and had accumulated to an enormous extent in all the cavities. A nauseous sweet smell issued from the whole body.†

The following illustration is also extremely interesting. Elizabeth Clarke, aged 54, was admitted into St. Bartholomew's hospital, June 20th, 1833. She was a patient in the hospital about a month, during which time she presented no marked symptoms, lying usually in a *semi-comatose* state. She had been in the habit of drinking freely of spirits, frequently to the amount of a pint and a half of gin daily. On a post-mortem examination her body presented the following appearances. The *brain* was small and very pale. The *lungs* appeared shrivelled within the chest, but free from any adhesions. The *heart*, especially on the right side, was loaded with fat, being in some situations nearly an inch in thickness; fat was also deposited between the muscular fibres; in the right ventricle THE ADIPOSE TISSUE WAS IN GREATER PROPORTION THAN THE MUSCULAR. The left ventricle was hypertrophied, (that is, enlarged) without any increase of capacity. The bicuspid valve was thickened, and the aortic valves contained some bony deposit, sufficient to impede their function. A small cellular band,

half an inch in length, extended from the apex of the heart to the loose pericardium. The *liver* was small, without any change of structure. The *left ovary* contained an ounce of serum in a cyst. The other viscera displayed no remarkable alterations.

Bulk, also, is no certain indication of weight. Numerous cases have come under the author's observation, in which the bulk of persons who have abandoned *in toto* the use of all inebriating liquors, has diminished to a considerable extent; while their weight has been much greater, (sometimes to an extraordinary degree) and their muscular developments have exhibited more solidity and firmness. The author has demonstrated this fact by numerous and accurate experiments. The reason is obvious. The muscular, or solid, parts of the system have received more nutriment, and thus acquired greater solidity, while nature has divested herself of the morbid redundancy of semi-putrescent and unnatural fat.

Bennett, in his "Wanderings of a Naturalist," relates an interesting instance of the weight acquired by the system during a period of abstinence from inebriating liquors. It is well known that the servants of the settlers in New South Wales, are convicts, and, in general, greatly attached to the use of spirituous liquors. It is a common practice with these individuals to feign sickness, in order to get a trip to the capital, one hundred miles off, by way of holiday. One of them having been convicted of some offence, was sentenced to three months hard labour at the chain gang, in the laborious work of road making. His companions, by way of amusement, weighed him before his departure, and chalked the amount on the barn door. Notwithstanding, adds the writer, the far harder labour he had to perform, yet the salutary influence of good Adam's ale, and regular diet, instead of his former spirituous potations, was such, that on his return, being again weighed, they found he had gained about twenty pounds.

A similar case is related of Peter Heman, a man, who for "murder and piracy on the high seas," was sentenced to be hung on the Leith Sands, Scotland, 1822. For some reason or other, his execution did not take place for nearly three months after his condemnation. His diet, as usual in prisons, consisted of bread and water. At the time of his execution he was in most robust health, and had, since his trial, decidedly gained flesh. When his body was dissected every part was found to be in a very healthy condition. The same fact is commonly observed in our prisons.

The absorbent vessels and glands, or glands through which the absorbent vessels pass, are often much diseased in drunkards. Dr. R. G. Dods remarks, that "being kept under constant irritation, they become enlarged, hardened, and variously altered in structure, till at last they cease to carry on

* Parl. Evid., p. 102.

† Rust's Magazin, für die gesammte Heilkunde. XXI. 522.

the functions to which they are destined, and the fluids which they used to transmit become effused into the surrounding parts."* Hence, one common cause of dropsy. Dr. Trotter observes, that the "lacteal vessels themselves, by the frequent application of alcohol, are rendered torpid, constricted, or impacted, and the glands of the mesentery, for the same reason, are made impervious."† These diseased changes of the absorbent glands and vessels, issue in a diseased condition of the juices employed in nutrition, and thus directly sap the very foundation of health. Dr. Trotter, in reference to the diseases of the lacteal vessels, and other alimentary organs, says that "like many others which follow ebriety, they give little pain; and as the mental powers are lulled into stupor the greater part of the day, the approaches of an incurable malady are not sufficiently watched."‡

XI. *The skin, hair, and their functions.*— Habitual toppers are commonly observed to be subject to cutaneous eruptions. These vary both in their nature and in their character.

The *guttæ rosacæ*, or florid eruptions on the face, and in particular on the nose, are too familiar and characteristic objects of attention, to pass unnoticed. These eruptions are in fact "signals which nature holds out, and waves, in token of internal distress." They exhibit the fearful conflict of the physical powers with their mortal enemy, which has been going on within; and are the safety valves which nature herself has formed for partial protection and relief, Shakspeare denominates these marks of bacchanalian indulgence, *bubucles*, *whelks*, and *rosy drops*, and characterizes the unfortunate subject of them as "the knight of the burning lamp."

Falstaff thus describes Bardolph's nose. "Thou art our admiral, thou bearest the lantern in the poop, but 'tis in the nose of thee; thou art the knight of the burning lamp. I never see thy face but I think upon hell fire; but for the light in thy face, thou art the son of utter darkness. When thou ran'st up Gadshill in the night to catch my horse, if I did not think thou hadst been an *ignis fatuus*, or a ball of wild-fire, there's no purchase in money. Thou hast saved me a hundred marks in links and torches, walking with thee in the night betwixt tavern and tavern: but the sack that thou hast drank me, would have bought me lights as good and cheap, at the dearest chandler's in Europe. I have maintained that salamander of your's with fire, any time this two-and-thirty years."||

The face of particular drunkards, as Dr. Trotter remarks, at certain times, appears as much like a burning coal as any thing can well be conceived.

Randolph, one of our quaint old poets, speaks of the "capacious bowl" as

"Spoiling the beauteous face;
Puffing the cheeks; blearing the curious eye;
Studding the face with vicious heraldry.
What pearls and rubies doth the wine disclose,
Making the purse poor to enrich the nose."

A prose writer, of the earlier part of the seventeenth century, in a no less quaint and humorous description of the drunkard, uses these words: "His nose, the most innocent part of his person, bears the corruption of his senses, folly; from it may be gathered the embleme of one falsely scandalized, for it, not offending, is *colourably* punished."

Dr. Farre relates the case of the chairman of the most notorious drinking club that perhaps ever existed in London. He was a ruddy old man at eighty-four. His knuckles were radiant with gout, and his face was glowing with the *color rosacea* of intemperance, venting itself, as Dr. Farre remarks, at his protuberant and fiery red nose, which although of a prodigious size was not quite so enormous a nose as the one described by Sennert, which "impeded vision, and required lopping." He acknowledged that he had reformed for thirty years of his life, and some estimation may be formed of his previous habits by his reform, for his allowance consisted of one pint of brandy a day, and six glasses of madeira after dinner. This man was called by vendors of liquor, a decoy. Dr. Farre was curious to ascertain how many of his companions, for it was a notorious club, were living. There was not, it appears, one living; he had buried three sets of them.†

Dr. Rush speaks of these eruptions under the name of "*rum buds*," other writers denominate them "*grog blossoms*." They are, however, produced by any potent alcoholic fluid. The truth is somewhat correctly conveyed in the following graphic lines:

———— "Whene'er thou dost perceive a nose,
That red with many a large earbuncle glows,
Thou may'st conclude, nay, thou may'st safely
swear,
That nose was never nursed upon small beer."

The appearance of the face differs according to the temperament of the individual, and the stage at which the disease has arrived. It has been observed, that, in the red faced drunkard, the poison acts most upon the surface, while in the pale faced drunkard, it preys upon his vitals. Dr. Darwin, in his *Zoonomia*, speaks of these eruptions as sympathetic of disease of the liver. Dr. Macnish thus animadverts on this point: "I have remarked that drunkards who have a foul, livid, and pimpled face, are less subject to liver complaints than those who are free from such eruptions. In this case, the determination of blood to the surface of the body seems to prevent that fluid

* Parl. Evid., p. 224.

† Essay on Drunkenness, p. 134. ‡ Ibid. p. 135.

|| Henry IV, Part 1, Act iii.

* John Stephens, the younger, of Lincoln's Inn, 1814.

† Parl. Evid. p. 137.

from being directed so forcibly to the viscera, as it otherwise would be."*

Dr. Rush remarks that these eruptions, which generally begin on the nose, afterwards gradually extend all over the face, and sometimes descend to the limbs in the form of leprosy. In persons, he further observes, who have occasionally survived these effects of ardent spirits on the skin, the face, after a while, becomes bloated, and its redness is succeeded by a death-like paleness.†

The florid nature of these eruptions, is no doubt occasioned by a chemical change, effected by exposure to the oxygen of the atmosphere, on the otherwise dark and unhealthy blood which is found in the bodies of drunkards.

The skin of drunkards differs much in its appearance. This characteristic is remarkably displayed in the beer-drinker and the spirit-drinker. Hogarth, in one of his celebrated pictures, called Gin-lane and Beer-street, makes this distinction a point of considerable prominence.

Dr. J. Baxter, of America, thus describes these cutaneous eruptions. "There are," he remarks, "appearances of two different kinds, which are the reverse of each other. One is the shining rosiness, accompanied with rough granulations, or tubercles. It commences at the end of the nose, and spreads over the countenance, interspersed with blue streaks, and is increased by new potations, exercise, fire, or any exciting cause. The other is a pale and pulpy appearance, with a sallow hue, indicative of the liver being affected by frequent potations, the eye-lids are swelled, the eyes red and inflamed. In cases of the first kind, the constitution holds out with more evenness, but the decay is more sudden. It most frequently terminates in apoplexy. In those of the second kind, life is drawn out like a fine wire, through premature old age and sufferings, first of the digestive organs, then of the liver, and, if any predisposition exist, of the lungs."

The skin is subject to a variety of disgusting eruptions from the effects of alcoholic liquors. Dr. Darwin speaks of one of these under the denomination of *Psora Ebriorum*. "Elderly people," he remarks, "who have been much addicted to spirituous drinks, as beer, wine, or alcohol, are liable to an eruption all over their bodies, which is attended with very afflictive itching, and which they probably propagate from one part of their bodies to another with their nails, by scratching themselves." Dr. Macnish tells us, that he has met with several cases of the same disease.‡ In addition to these there are some ulcerous affections of the skin, of a loathsome nature, which have been observed in persons of intemperate habits. Dr. Trotter,

when physician to the fleet under Lord Howe, had an opportunity of witnessing an affection of this nature. It was an ulcer, he remarks, of the most malignant kind on record, and, in its character was directly opposite to the scorbutic ulcer. What was found a certain cure for the sea-scurvy had no effect on this sore. "The least scratch on the skin, the puncture of a lancet, a blistered part, but especially scalds and burns, degenerated into this ulceration, with a rapidity not to be conceived. Large loss of muscular flesh from sloughs, and caries of bone, were the consequence. An unusual factor attended this sore, beyond what even large sloughs occasion."* The same characters, in a modified form, will be found to attend all ulcerous affections with which the intemperate are afflicted. "When drunkards," remarks Dr. Macnish, "are affected with serofula, scurvy, or any cutaneous disease whatever, they always, *ceteris paribus*, suffer more than other people."†

The following interesting remarks are from the pen of Professor Francis. "The body of the dead inebriate often exhibits, in its external parts, a physiognomy quite peculiar, and as distinctive as that which presents itself when life has been terminated by an over-dose of laudanum. Sometimes the surface, more especially at its superior parts, as about the head, neck, or face, betrays a surcharged fullness of the vascular system: and the cutaneous investiture of these parts and of the extremities, is characterized by the results of an increased action of the extreme vessels, by blotches and discolorations of different hues, &c.; and this state, the consequence of previous over-action and being worn out by excitement, has so impaired the vital energies of the surface, that effusions of a serous or sanguineous character are to be observed. Hence *purpura hemorrhagica*, an affection, in most instances, occurring in persons of depraved habits, vitiated still further by scanty or unwholesome food, and deleterious drink, is often to be noticed in inspecting the cadaver of the drunkard. I remember a striking case of the extraordinary changes to which the common surface is capable of being brought, while attending a suffering victim, some five or six days, the duration of his last illness. The subject was a middle-aged male, who had long indulged in the free use of distilled spirits. He died of universal dropsy. Some few days previous to his disease, purple blotches were seen on his chest, shoulders, and abdomen; and hemorrhagic discharges from the surface of his inferior extremities were observed in several places; and these discharges continued until the close of life. The quantity lost in this manner was many ounces, nor would kreosote or pyroligneous acid, or any other remedy, modify in the least the san-

* Anatomy of Drunkenness, p. 145.

† Inquiry into the Effects of Ardent Spirits, by B. Rush, M.D.

‡ Anatomy of Drunkenness, p. 146.

* Essay on Drunkenness, p. 139.

† Anatomy of Drunkenness, p. 156.

guineous discharge. I have also known old cicatrized wounds to bleed anew in such subjects, previous to their decease, and blistered surfaces to become extremely annoying. It is difficult to set forth the numerous modifications of disordered action manifested in the extremities: the inferior limbs are the special seat of suffering, because these parts partake largely of that indirect debility which so certainly follows improvident excitement. Sometimes we see in these desperate habits the elephantine leg. A formidable catalogue of cutaneous affections is a legitimate sequel to a long course of intemperance. Five of the most protracted cases of ichthyosis for which I have prescribed, owed their origin to the depraved condition induced by gross intoxication. The tuberculated aspect of Bardolph's face is but a very limited part of the cutaneous annoyances of inebriety."*

The perspiration which exudes from the skin in the drunkard, becomes impregnated with alcohol. In some cases the kind of liquor drunk is perceptible to the senses. "The perspiration of a confirmed drunkard," remarks Dr. Macnish, "is as offensive as his breath, and has often a spirituous odour. I have met with two instances, the one in a claret, the other in a port-drinker, in which the moisture which exuded from their bodies had a ruddy complexion, similar to that of the wine on which they had committed their debauch."† Again, observes the same writer, "the perspiration of the wine-drinker is often of the hue of his favourite liquor: after a debauch on Port, Burgundy or Claret, it is not uncommon to see the shirt or sheets in which he lies, tinted to a rosy colour by the moisture which exudes from his body."‡

The *hair of drunkards* suffers in common with other parts of the human frame. Dr. Macnish remarks that it is "generally dry, slow of growth, and liable to come out."|| Drunkards are in consequence more frequently the subjects of baldness than others. Baldness and imperfect growth of hair, in such subjects, originates in the lack of vital power or physical energy, which characterizes the frame of the inebriate.

Dr. Hales, so distinguished for his philosophical investigations, makes the following interesting and curious remarks:—"It is the well known observation of the dealers in hair for wigs, that they can distinguish the dram-drinker's hair by the touch, finding it dry, harsh, and dead-ended, and unfit for use." And again, "It is also found that these pernicious drams not only alter the quality, but also by their drying and corrosive power lessen the quantity of hair: and what is a melancholy proof of the great prevalence of this wicked practice, there is now so much less hair to be bought among

the lower people, that our hair dealers are obliged to send money abroad to purchase *French* and other foreign hair. So surprisingly extensive is the mischief of gin drinking."*

XII. *The muscular system, bones, joints, and their functions.*—The *muscular system* largely participates in the injuries which result from the use of strong drink. The wretched and emaciated appearance of the drunkard presents a melancholy wreck of human nature; a meagre outline, indeed, of the beauty and vigor and symmetry of health. The muscles of the drunkard, on examination are found to be contracted in their dimensions. They are also deficient in solidity, or flabby in their structure. The fibres of which they are composed, want that distinctness of form and colour which is characteristic of health, and which depends on a due fulfilment of the laws of nature. The water-drinking natives of the Himalaya mountains, says Mr. Buckingham, resemble the statue of Hercules, "with all their muscular powers finely developed, their broad and expansive shoulders and breasts, with their firm muscles like rolling waves." Contrast this description with the puny, feeble and ungraceful figures of those who indulge in the luxuries and effeminate pursuits of European nations. Captain Ellis informs us, from personal observation, that the natives of the very cold coast of Hudson's Bay, who refrained from the use of alcoholic drinks, were tall, robust, and active. Those, however, who were supplied with drams by the English, were meagre, small, and indolent, unable to contend with the hardships of the climate, and subject to many disorders.†

The muscles of drunkards are not only deficient in structure and form, but also in *capacity* or *power*. Numerous illustrations of this fact are adduced in the section on "the fallacy of popular objections." The deficiency of power is not alone confined to the muscles of the external man. The *stomach*, the *intestines*, the *blood-vessels*, and other organs of the human frame, are supplied with muscular fibres or coats; and thus intemperance injures, in this respect, the several functions of digestion and circulation. Want of *tone* in the stomach, commonly induced by the use of strong drink, is a prolific cause of indigestion, and debility of the muscular coats of the intestines, or blood-vessels is, of course, attended with corresponding deficiency of action.

Muscular disease is a common result of intemperance. Ulcers of the skin, the result at first of some trivial cause, extend with fearful rapidity to the muscles, and large loss of substance is the consequence. An example of this kind has already been ad-

* Bacchus, American Ed., p. 467.

† Anatomy of Drunkenness. p. 143.

‡ Ibid. p. 109. || Ibid. p. 146.

* Letter on the Unwholesomeness and Destructiveness of Fermented, Distilled, and Spirituous Liquors. Repub. 1750.

† Voyage to Hudson's Bay. p. 199.

duced from the valuable Essay of Dr. Trotter. The daily experience of medical men affords additional illustrations.

The effects of alcohol on the flesh is, to some extent, manifest in its influence on those animals who are fed on the sediments of barrels. The *sediment* or *refuse liquor* left in the vats, contains, of course, more or less alcohol. Dr. J. Baxter, of the United States, observes, that "in brew-houses, where fowls are fed upon the sediment of the liquor, their *viscera become schirrous, hard, and enlarged; the mesentery, &c., enfeebled and engorged, and disposition to hæmorrhage produced.*" Dr. Trotter remarks, in reference to hogs and poultry thus fed, that were these animals not killed at a certain period, *their flesh would be unfit to eat*, and their bodies become emaciated. Some facts, in illustration of this point, were made known in 1745, in a Report of a Committee of the House of Commons, appointed in consequence of a petition of several yeomen, farmers, and graziers, in the counties of Middlesex, Surrey, and Kent, concerned in the growth of corn, and the breeding and fattening of cattle; and also the petition of the yeomen and farmers of East Kent. Mr. Timothy Child, in evidence said, that he had been engaged in the business of making bacon, upwards of twenty years. He had bought hogs fatted by farmers and distillers. *The pork and bacon of distillers' hogs was not near so good as the farmers', if kept any time; nor was the flesh so firm when dressed. It wasted in the dressing very much. Six pounds of bacon, fed in the country, would do as much service as eight pounds of that which is fed by distillers.* The flesh of distillers' hogs would take salt, being of a soft nature; but it was unwholesome when kept in salt or pickle any time. Half of it would be rotten, when the flesh of the farmers' hogs, killed at the same time, would be very good. Mr. John Jennings said, that the Commissioners of the Victualling-office had made an experiment, by salting some meat of hogs fed by distillers, and some of those fed by farmers. After each had been barrelled six months, both were opened, and *a great portion of the flesh of the distillers' hogs were found to be rotten, while the farmers' was very good.*

Dr. Farre, in the course of his examination before a Committee of the House of Commons, in 1834, remarked, "I was grieved to hear from the last Report of the Society for Feeding of Oxen, that the prize ox was fattened on *gin-wash*. I would myself, if I had been the disposer of the prize, have given it to that fed on wholesome food. This mode of feeding cattle renders the meat less wholesome."*

It seems quite clear from these facts, as well as from the experience of medical men, that a *disposition to putridity* is induced by

indulgence in alcoholic liquors. In *fevers* in particular, this state of the system degenerates into most fearful disease.

The *bones and joints*, more or less, participate in the general wreck of the system. A defect of vital power, the result of intemperance, renders them liable to disease on trivial occasions. In the drunkards of our ships in the Channel fleet, ulcers which had their origin in the least scratch of the skin, not only degenerated into muscular sloughs but *caries of the bone*.* *Fractures*, of comparatively little consequence in other persons, in drunkards are commonly attended with serious results. The secretions also of the body are depraved and unhealthy, and consequently unfit to effect that *re-union of parts* which speedily takes place when the system is in a vigorous and healthy condition.

Rheumatism is a frequent indirect consequence of intemperance. The oft-repeated midnight debauch of the drunkard, and his constant exposure to the vicissitudes of weather, render him peculiarly liable to this painful disease.

Gout is another common disease of the intemperate and sensual. It is the offspring of indulgence in wine, and almost altogether confines its visits to the habitations of the rich and the indolent. This disease is often hereditary. In such cases, moderate indulgence will bring on a severe attack. In others, it is the result of intemperance and debauch. The ladies of Rome, in its latter and degenerate days, were afflicted with the gout. Hippocrates, Galen, and Aretæus, attest its existence at an early period. It is no less the scourge of effeminacy and indulgence in modern times.

Inflammation of the joints and consequent *acute pains*, with more or less *tumefaction*, are the most prominent indications of this disease. These symptoms are usually considered as secondary, and tokens merely of constitutional conditions principally dependent on the digestive functions.

The frequent occurrence of this disease among the higher ranks, and its torturous effects on its victims, induces the author to extract copiously from medical and other writers on this subject.

Sir W. Temple, in his well known Essay, enters at length into the causes and cure of the gout, a disorder which, he remarks, entails the worst consequences to mankind, because it generally falls upon persons engaged in public affairs and great employments, upon whose thoughts and cares, (if not their motions and their pains) the common good and service of their country so much depends. The illustrations of Sir W. Temple are interesting and important. One great minister confessed to him that when he fell into one of his usual fits of the gout, he was no longer able to bend his mind or

* Parl. Evid. p. 102.

* Trotter's Essay on Drunkenness, p. 110.

thoughts to any public business, nor give audiences beyond two or three of his own domestics, though it were to save a kingdom. This did not proceed from any violence of pain, but from a general languishing and faintness of spirits which made him in those fits think nothing worth the trouble of one careful, or solicitous thought.

Sir W. Temple was, on one occasion, the subject of this bodily affliction. Experience and observation led him to these conclusions: "The gout is a companion that ought to be treated like an enemy, and by no means like a friend. It grows troublesome, chiefly, with good usage; and this was confirmed to me by considering that it haunted usually the easie and the rich, the nice and the lazy, who grow to endure much, because they can endure little; that make much of it as soon as it comes, and yet leave not making much of themselves too: that take care to carry it presently to bed, and keep it safe and warm, and indeed lay up the gout for two or three months, while they give out that the gout lays up them. On t'other side, it hardly approaches the rough and the poor, such as labour for meat, and eat only for hunger; that *drink water, either pure or but discoloured with malt; that know no use of wine, but for a cordial*. Let the disease be new or old, and the remedies either of common or foreign growth, there is one ingredient of absolute necessity in all cases: for whoever thinks of curing the gout without great temperance, had better resolve to endure it with patience." He then relates the case of Atticus, who, weary of his life, as well as his physicians, by long and cruel pains of a dropsical gout, and, despairing of any cure, resolved by degrees to starve himself to death, and went so far, that the physicians found that *he had ended his disease instead of his life*, and told him that to be well, there was nothing required on his part, but the resolution to live. Sir W. Temple further remarks,—"*I have known so great cures, and so many, done, by obstinate resolutions of drinking no wine at all, that I put more weight upon the part of temperance, than any other*. And I doubt very much whether the great increase of that disease in England, within these twenty years, (Sir Willam's Essay bears date, June, 1677) may not have been occasioned by the custom of so much wine introduced into our constant and common tables; for this use may be more pernicious to health than that of taverns and debauches, according to the old stile, which were but by fits, and upon set or casual encounters."*

Dr. Garnett's remarks on the nature and cure of this disease are equally pungent and conclusive. He very properly exposes the popular error that gout is a salutary complaint. He remarks that it restores health in no other way than the indigestion of

an habitual dram-drinker would be relieved by a disease in the throat, which would, for a time, prevent his swallowing any more liquor. The consequence would be that his digestive powers would recover their tone, and after a few weeks, he would feel himself better. "The idea," says the same writer, "that the gout is incurable, is a false, and a very dangerous doctrine; this is very far from being the case, and *I am firmly persuaded, not only from the nature of the disease, but from experience, that it may always be cured, if taken in time, and proper directions be followed*." "If, by the cure of the gout, be meant the administration of some pill, some powder, or some potion, which shall drive away the complaint, I firmly believe that it never was, nor ever will be, cured. Indeed, it is astonishing that such an idea should have ever entered the mind of any person, who has any knowledge of nature, or particularly of the human frame; for if the gout be a disease of indirect debility, and the effect of intemperance, as will be shown by and by, then a medicine to cure it must be something to enable a man to bear the daily effects of intemperance, during his future life, unhurt by the gout, or any other disease; that is, it must be something given now, that will take away the effects of a future cause: as well might a medicine be given to prevent a man breaking his leg or his arm, seven years hence." "A rational physician would advise a person, recovering from the gout, *to abstain totally and entirely from the course of life which brought it on*; and this being complied with, we might venture to predict, with as much certainty in the one case as in the other, that he would in future escape it." Dr. Garnett then proceeds to give dietetic and other directions, which, he affirms, if rigidly persevered in, will not only afford relief in the fit, but will prevent its return with such violence, and, at last, totally eradicate it, provided the constitution be not completely exhausted, and almost every joint stiffened with calcareous concretions. "*The whole secret consists in abstaining, in toto, from alcohol, in every form, however disguised, or however diluted. He must not take it, either in the form of liqueurs, cordials, wine, or even small beer. I believe there never was an instance of a person having the gout, who totally abstained from every form of alcohol, however he might live, in other respects; and I doubt very much if ever the gout returned after a person had abstained from fermented or spirituous liquors for two years*."

Temperance in eating, and exercise, are no doubt, powerful auxiliaries and tend very much to promote health; but still they will not secure a person from a return of the gout, without this precaution. *There seems something in alcohol, which particularly brings on this state of the constitution, and without it, it would seem that gout could*

* Essay on the Gout. *Miscellanea*, Part 1.

not be produced. Here, then, is an effectual method of curing the gout." And, again, after some directions as to diet, he concludes: "*The grand secret, in the cure, as has been already observed, but which cannot be too often inculcated, is to abstain, in toto, from every thing that contains alcohol.*"

Dr. Darwin remarks, "in respect to the pre-remote cause or disposition to the gout, there can be no doubt of its individually arising from the potation of fermented, or spirituous liquors in this country. I have seen some, and have heard of others, who have moderated their paroxysms of gout, by diminishing the quantity of fermented liquors, which they had been accustomed to; and others, who, by a total abstinence from fermented liquors, have entirely freed themselves from this excruciating malady, which, otherwise, grows with our years, and curtails, or renders miserable, the latter half, or third, of the lives of those who are subject to it." Dr. Darwin then adduces the following opinion of the great Sydenham, who saw the beneficial effects of abstinence from fermented liquors, in preventing the gout. "If an empiric could give small-beer only, to gouty patients, as a nostrum, and persuade them not to drink any other spirituous fluids, he might rescue thousands from this disease, and acquire a fortune for his ingenuity." Yet, remarks Dr. Darwin, it is to be lamented, that this accurate observer of diseases had not resolution to practice his own prescription, and thus to have set an example to the world of the truth of his doctrine. On the contrary, he recommended Madeira, the strongest wine in common use, to be taken in the fits of the gout, to the detriment of thousands, and is said himself to have perished a martyr to the disease which he knew how to subdue!*

Dr. Darwin then relates the following narrative of his own experience: "E. D. was about forty years of age, when he was seized with a fit of the gout. The ball of his right great toe was very painful, and much swelled and inflamed, which continued five or six days, in spite of venesection, a brisk cathartic, with ten grains of calomel, and the application of cold air and cold water to his foot. He then ceased to drink ale or wine alone, confining himself to small-beer, or wine diluted with about thrice its quantity of water. In about a year, he suffered two other fits of the gout, in less violent degree. He then totally abstained from all fermented liquors, not even tasting small-beer, or a drop of any kind of wine, but ate plentifully of flesh-meat, and all kinds of vegetables, and fruit, using for his drink at meals, chiefly water alone, or lemonade, or cream-water; and tea and coffee between them as usual. By this abstinence from fermented liquors, he kept quite free from the gout for fifteen or six-

teen years, and then began to take small beer, mixed with water, occasionally, or wine and water, or perry and water, or cyder and water; by which indulgence, after a few months, he had again a paroxysm of the gout, which continued about three days in the ball of his toe, which occasioned him to return to his habit of drinking water, and he has now, for above twenty years, kept in perpetual health, except accidental colds from the changes of the seasons. Before he abstained from fermented, or spirituous liquors, he was frequently subject to the piles, and to the gravel, neither of which he has since experienced."*

XIII. *The organs of the senses and their functions.*—These organs are each more or less influenced by intemperance. *Stammering*, a common result of intoxication, is produced by a disordered state of the brain and nervous system. The action of the muscles employed in speech, of course depends on the brain, the grand centre of sensation. The lingual nerves on which the action of the tongue depends, are under the influence of partial paralysis.

The body, in a state of intoxication, manifests remarkable *insensibility to pain and external impressions*. This doubtless depends on partial paralysis of the nervous system, which extends to the filaments which ramify on every tissue, and in their natural state render the body sensible to pain and other impressions. Wounds and bruises of the most serious description, are often inflicted during a state of inebriation, without the most trifling exhibition of feeling, and often without recollection. These cases frequently occur among seamen. Dr. Trotter relates the case of a sailor belonging to a king's ship, in which he at that time served, who, while drunk, quarrelled with his wife, and, in the fury of his passion, seized a butcher's cleaver, and cut off two of his fingers by the root. The wounds were dressed and the man put to bed. When he awoke in the morning, he had no remembrance of the circumstance; showed the utmost contrition, and wept like a child for his misfortune, when he was told that he done it himself.†

A vitiated condition of the nervous fluid, doubtless results from continued intemperance, accompanied with corresponding defect in all those functions which depend on its purity and strength.

The *gustatory branches of the lingual nerves are also injured by intemperance*, so that the utterance not only becomes thick and indistinct, but the *sense of taste becomes depraved*, and in progress of time entirely lost.

Tenderness and redness of the nostrils are common effects of drunkenness. The highly sensitive membrane of the nostrils is a con-

* Zoonomia, vol. IV. p. 205.

* Zoonomia, vol. IV. p. 205.

† Essay on Drunkenness, p. 62.

tinuation of the mucous or lining coat of the stomach and œsophagus. This fact explains its irritated condition in drunkards, and the *loss of smell* which necessarily follows continued unnatural excitement of the schneiderian membrane.

Drunkards are often subject to *ringing in the ears*, a peculiarly unpleasant sensation. This is caused by the increased action of the vessels within the head, and in particular of the carotid arteries, which circulate immediately adjacent to the auditory organs.

The *organs of sight* are much injured by the use of strong drink. *Inflammation of the eyes*, sometimes acute, but most frequently chronic, is a characteristic badge of intemperance. Solomon asks, "*who hath redness of eyes,*" and then informs us, that this disorder afflicts those who "tarry long at the wine, and go to seek mixed wine."* The excited circulation of blood is well seen in the eyes of the drunkard. The vessels of the *tunica adnata*, or white membrane which covers these delicate organs are turgid and red, which conditions, by continued intemperance, often end in confirmed inflammation, accompanied with pain and intolerance of light. Chronic inflammation is commonly attended with increased secretion of the glands of the orbit; hence, the moist or watery eyes of the drunkard. These changes inevitably influence the delicacy of the retina. In course of time, that portion of the tunic which covers the cornea, loses its natural clearness and transparency, and dimness of vision is the consequence. The specks also on the eyes of drunkards, are the effects of inflammation.

Double vision often occurs during fits of intoxication. It probably arises from increased circulation in the brain, and the consequent effects on the nerves which supply the organs of sight. All nerves are supplied with blood-vessels, and every unnatural impulse of blood is calculated to derange their peculiar functions. False impressions may thus be conveyed to the brain. Dr. Macnish remarks, that the refraction of light in the tears, which are secreted more copiously than usual during intoxication, may also assist in multiplying objects to the eye.†

XIV. *The teeth and their functions.*—The intimate connection which subsists between the teeth and the digestive functions, explains the frequency of their decay among drunkards. The cleanliness of the teeth depends to a great extent on the nature of the secretions of the mouth, and the healthy condition of the mucous membrane which lines the mouth, œsophageal canal, stomach, and intestines. Tooth-ache frequently arises from a disordered state of the stomach, and the tartar on the teeth has a similar origin. Mr. Fox, of Argyle Street, London, a very competent authority, makes the following

interesting observations on this subject. "Fermented liquors are injurious to the teeth, in proportion to the quantity and quality of the liquor which is used. Persons who are in the daily practice of drinking a quantity of wine, are rendered more subject to the accumulation of that earthy substance, which by the dentists is called tartar. The formation of this substance upon the teeth, destroys that agreeable expression of the countenance which proceeds from clean teeth, it renders the breath tainted, and, as a constant effect of its accumulation is to detach the gums from the teeth, they become weakned in the sockets, they get loose, and eventually drop out. When people have habituated themselves to the use of spirituous liquors, the injurious effects upon the teeth are more apparent. The teeth acquire a very stained and foul appearance; the gums being more or less inflamed, are covered with a slimy mucus, and are often liable to bleed: the breath also becomes very offensive. And as the regular passing of the spirituous liquors over the tender skin of the mouth, creates a constant degree of inflammation, the heat of the mouth is greatly increased. This state of the mouth is also kept up by the increased heat of the stomach, and when, by the debilitating effects of spirits upon that organ, indigestion is produced, the teeth very rapidly fall into a state of decay: they are acted upon constantly in the same manner as in the course of a fever, when the heat of the constitution is greatly increased. Thus by the baneful influence of intemperance, similar mischief to the teeth is induced, as might only be expected from a malady which threatens life."

Mr. Fox informs us, that General Norton, the Mohawk chief, who was in this country some years ago, was asked by a professional gentleman concerning the state of the teeth amongst the Indians. His reply was decisive.—"When the Indians are in their own settlements, living upon the produce of the chase and drinking water, their teeth always look clean and white: but when they go into the United States, and get spirituous liquors, their teeth look dirty and yellow; and I have often heard that they were frequently afflicted with the tooth-ache, and obliged to have their teeth drawn."

Daily observation confirms the truth of the above remarks.

XV. *Premature old age.*—Time makes rapid inroads on the constitution of the drunkard. A few months suffice to produce changes, the apparent result of anxious years. General signs of ill-health first present themselves,—the eyes want their accustomed lustre, the skin loses its usual healthy and ruddy appearance, the cheeks lack their wonted plumpness and rotundity,—that vigor and elastic movement of the body is absent which constitutes one of the principal characteristics of health. Shak-

* Proverbs, Chapt. xxiii. v. 29-30.

† Anatomy of Drunkenness, p. 114.

spearewell describes the effects of strong drink in producing premature old age. The chief justice thus addresses the bibulous Falstaff: "Do you set down your name in the seroll of youth, that are written down old, with all the characters of age? Have you not a *moist eye, a dry hand, a yellow cheek, a white beard, a decreasing leg, an increasing belly?* Is not your voice broken, your wind short, your chin double, your wit single, and every part about you blasted with antiquity; and will you yet call yourself young? Fie, fie, fie, Sir John."*

In progress of time these effects become more and more marked. The eyes not only lack their usual lustre of expression, but become sunken and dead. The muscles of the cheek, as indeed those of the whole body, present an emaciated and shrivelled appearance. The skin hangs loosely upon a frame, the mere skeleton of its former existence; and the entire motions both of body and mind are those of individuals labouring under the last changes of debility and decay.

The voluntary muscles of confirmed drunkards, not only lose their power of action but cease to obey the will; decrepitude of mind accompanies decrepitude of body—hence, their tottering and grotesque movements. The same irregularity is also displayed in the nervous functions throughout. Convulsive twitchings—such as quivering of the lip, and involuntary winking of the eye, evidence the paralyzing influence of strong drink. The inflamed and œdematous state of the organs of sight, the bloated body, the dry and feverish hand—present still further proofs of decay and dissolution. Death at last makes its appearance, and terminates the melancholy scene. The frame of the inebriate quickly mingles with its mother earth.

The diseased deposits of drunkards exhibit perhaps the most characteristic evidence of premature old age. The body, in a state of health, to use the words of the eloquent Buffon, dies slowly and by degrees; life gradually becomes extinguished, and death is but the last term of this series of degrees, *the last shade of life.* Not so with the drunkard. The progress of his decline is rapid and by strides, rather than slow and by imperceptible degrees. Changes take place in his physical structure, at an early age, which in the sober and healthy only manifest themselves in the decline of advanced years. The various structures of the temperate slowly but progressively become impregnated with earthy or calcareous matter. It would seem as if the body of man was designed, not figuratively, but in truth, to approach in nature to that earth with which shortly it is to form an indissoluble union, a literal fulfilment indeed of those expressive words of our burial service,

"earth to earth, ashes to ashes, dust to dust." The bones in particular, and even many of the softer parts of the human system, as for example, the brain, become more hard, or in other words, more earthy in their nature. All of them indeed become slowly deprived of their vitality, until at last the functions cease to act, and death ensues as a necessary consequence. Depositions of calcareous or ossific matter in drunkards, take place in the heart, blood-vessels, and even in the citadel of existence itself—the brain. Morgagni, as we have already seen, discovered in some brains a bony substance and gypseous concretions. These deposits are found in numerous other organs. Dr. Alison remarks, that "there is a peculiarity of constitution often resulting from habitual intemperance, which disposes remarkably to chronic inflammation and *slow deposits of solid lymph* in the lining membrane of the heart and arteries, in the lungs, in the liver, and in the kidneys, often to such affection of several or all these viscera in the same subject."*

These earthly depositions sometimes take place at a remarkably early period, and exhibit a striking proof how, at a comparatively juvenile age, intemperance effects changes in the system, which in temperate persons are the result only of advanced life. My friend Mr. Stephens, of Manchester, lecturer on pathology, &c., who has an intimate and extensive acquaintance with morbid anatomy, informs me, that he has almost invariably found these earthy depositions in post mortem examinations of drunkards, in particular in the arteries and mitral valves of the heart. In one case these organic changes were extensively manifest throughout the greater portion of the arterial system of a drunkard, *whose age did not exceed twenty-five years.* The marks of old age were present at a period when the body had scarcely attained to the full growth of manhood. This fact speaks volumes as to the evils of intemperance.

* System of Pract. Med., Vol. i. p. 72. Art. Inflammation.

* King Henry IV., Act i. Scene 2.

SECTION VI.

THE EFFECTS OF INTOXICATING LIQUORS ON THE
BRAIN AND NERVOUS SYSTEM.

Ebrietas est voluntaria insania.—SENECA.

“O! that men should put an enemy in their
mouths, to steal away their brains.”

SHAKSPEARE.

I. General view of the mental phenomena produced by inebriation.—II. Effects of increased circulation of the blood on the brain and nervous system.—III. Palsy, epilepsy, and apoplexy, produced by intemperance.—IV. Delirium tremens, or brain fever of drunkards.—V. Madness and idiocy, in England, Ireland, Scotland, America, and other parts, the results of intemperance.—VI. Organic changes produced in the brain by intemperance.

I. THE brain and its functions, rank above all other portions of the animal economy in importance. Its complicate and delicate structure, combined with its intimate connexion with the faculties of the mind, renders it a matter of peculiar necessity that it should be guarded from all such injury and improper excitement, as might tend to interfere with its exquisite harmony, or, in the slightest degree, derange the order of its healthful operations.

An investigation of this subject necessarily involves an inquiry into all the mental phenomena produced by the use of strong drink. Some of these phenomena have received specific consideration in previous sections. The pleasures of inebriation are unnatural and acquired. Intoxication, in whatever degree, is productive of disagreeable sensations to the unvitiated palate of the young. Even to those individuals, who, by long practice, are habituated to the use of strong drink, the gratification which it affords is evanescent as the fleeting clouds. Bishop Andrews describes the pleasure of vinous indulgence, to be in that state when a person is neither “drunken nor sober, but neighbour to both.” This, certainly, is the period when the mental faculties most labour under the illusions of alcoholic excitation. The imagination then soars to its utmost limits, and the passions, unrestrained by the exercise of reflection, or uncurbed by the admonitions of conscience, burst the trammels of sedateness and order. It is at this stage of excitement that the mind is most liable to err. The bashfulness of immature judgment suddenly assumes the confidence of truth.

The reasons they allege do more conduce
To the hot passions of distemper'd blood,
Than to make up a free determination
’Twix’t right and wrong: for pleasure and revenge
Have ears more deaf than adders, to the voice
Of any true decision

SHAKSPEARE.

The effects produced on the sensorium are, as yet, those of agreeable and apparently innocent excitement. The aspect of the scene,

however, soon changes. The power of volition ceases its exercise. Folly, in its thousand forms makes its appearance. The revels of a distorted imagination, displace the ebullitions of genius or of wit. All control of the will and judgement disappears, and a chaos of confused thought, disordered expression, and rash action, succeeds. Then supervenes the idiotic stare, the partial loss of voluntary motion, and the paralytic stupor of extreme intoxication.

Their feeble tongues,
Unable to take up the cumbrous word,
Lie quite dissolved. Before their maudlin eyes,
Seen dim and blue, the double tapers dance,
Like the sun wading through the misty sky.

THOMSON.

The morning, at last, makes its appearance. The high state of febrile excitement, the parched tongue, insatiate thirst, throbbing head, and extreme bodily lassitude which now ensue, render the returning day a state of horror and despair to the inebriate. The poet well describes the pleasures and pains of intoxication.

Elysium opens round,
A pleasing phrenzy buoys the lightened soul,
And sanguine hopes dispel your fleeting care;
And what was difficult, and what was dire,
Yields to your prowess and superior stars:
The happiest you of all that e’er were mad,
Or are, or shall be, could this folly last.
But soon your heaven is gone; a heavier gloom
Shuts o’er your head.

Morning comes; your cares return
With tenfold rage. An anxious stomach well
May be endured; so may the throbbing head;
But such a dim delirium, such a dream
Involves you; such a dastardly despair
Unmans your soul, as madd’ning Pentheus felt;
When, baited round Cithæron’s cruel sides,
He saw two Suns and double Thebes ascend.

ARMSTRONG.

The *melancholy of the drunkard* is intimately associated with the disordered state of the digestive functions, produced by alcoholic indulgence. A close connexion exists between the chylopoetic viscera, and the brain. The rapturous joys of the evenings debauch, are succeeded in the morning by extreme lassitude of mind and depression of spirits. The world with its pleasures presents an unattractive void—all is dejection and gloom. In this state the drunkard again flies to the cup of intoxication—the disease fastens upon him with renewed vigor, until at last confirmed hypochondriasis, renders existence a state of indescribable torture and distress.

The *modus operandi* of intoxicating liquors on the brain and nervous system, has been discussed at length in previous sections. The effects of alcohol are decisive both as regards its direct influence on the nerves of the stomach, and thence by sympathetical conveyance to the cerebro-spinal centres, and its immediate contact, by absorption, with the important substance of the brain. The lover of strong drink may well pause when he reflects on the fact, that a portion of the

fiery liquid which he swallows, enters even the citadel of existence, and by actual contact rends the structure, and disturbs the functions of the organ of the mind itself. This fact explains many of those phenomena of drunkenness, which formerly cast a shadow over that portion of physiological investigation.

II. *Effects of increased circulation of the blood on the brain and nervous system.*—Intoxicating liquors act upon the system in two ways. They not only operate upon the nerves and brain, but accelerate the circulation. Their influence, however, on the brain and nervous system, is undoubtedly of the most importance. *Increased circulation* of the blood accounts, for some portion at least, of the unnatural energy which the brain receives after vinous indulgence. Shakspeare puts into the mouth of Falstaff, the prince of toppers, the following characteristic language:—"A good sherries sack hath a twofold operation in it. It ascends me into the brain.—The second property of your excellent sherries is, the warming of the blood; which before, cold and settled, left the liver white and pale (!) which is the badge of pusillanimity and cowardice: but the sherries warms it, and makes it course from the inwards to the parts extreme. It illumineth the face; which, as a beacon, gives warning to all the rest of this little kingdom man, to arm: and then the vital commoners, and inland petty spirits, muster me all to their captain the heart; who, great and puffed up with this retinue, doth any deed of courage; and this valour comes of sherries: so that skill in the weapon is nothing without sack; for that sets it a-work."*

These words, in more scientific language, would present a tolerably accurate explanation of the manner in which the blood determines to the surface, from the heart and great blood-vessels, after alcoholic excitement. Hence, during vinous indulgence, the glow of heat which pervades the whole body, and the ruddy and expansive appearance of the face and eyes.

Determination of blood to the head is a common and frequently fatal effect of intemperance. *Incubus* or *night-mare*, in drunkards, arises from preternatural fulness of the vessels of the brain. Inebriates are peculiarly subject to unpleasant dreams. The hour of repose is disturbed with fitful and grotesque conceptions of things and events which not unfrequently produce so deep an impression on the mind, as on returning wakefulness to induce a strong conviction of their actual occurrence. Dr. Trotter relates the circumstance of an officer much accustomed to hard drinking, who awoke suddenly after a free debauch at the mess-table, and told one of his brother officers in a peremptory tone of voice, that as it was an affair of

honour, now was the best time for settling it; and insisted upon their taking their ground immediately. It was with great difficulty that he was pacified; and no small remonstrance took place before he was convinced that the affair was altogether the offspring of his dreams.*

Burton also relates a very ludicrous dream which some young men of Agrigentum, Sicily, had after a drinking bout.†

The drunkard is not only liable to the *night-mare* and *fearful dreams*, but to *somnambulism*, or *walking in his sleep*, as well as *sleep-talking*. Both these conditions have their origin in the grotesque but fruitful conceptions of a disordered brain.

III. *Palsy, epilepsy, and apoplexy, produced by intemperance.*—*Palsy, epilepsy, and apoplexy*, are among those diseases of the brain, which are not unfrequently brought on by intemperance.

The trembling hands, and shaking head, of inebriates, in particular in the morning, betoken that confirmed disease of the brain and nervous system, which shortly makes its appearance as the dread harbinger of death.

Apoplexy is a common and fatal effect of intemperance. It is correctly defined to consist in defective vital energy, with hæmorrhage, or derangement of the vascular system of the brain, and their consequences. Apoplexy is attended with a loss of consciousness, feeling, and voluntary motion. The functions of the brain are suspended, together with derangement of the functions of respiration and circulation. Persons who indulge in strong drink, and possess the *apoplectic form or make*, that is, individuals with large heads, short necks, and fulness of blood, are peculiarly prone to attacks of apoplexy. Great numbers of individuals, who are never suspected of intemperance, fall victims to this dreadful disease; those, for example, who daily indulge in rich food, and drink plentifully of wine, and who are of indolent habits, in particular if there is any apoplectic condition of body.

"*In seven cases out of ten*," observes Dr. Macnish, "*malt liquor drunkards die of apoplexy or palsy.*"‡ Dr. Trotter remarks, that he knew a number of persons of both sexes, but particularly seamen, who were subject to epilepsy, and never got drunk without a fit coming on.||

Attacks of this description frequently arise in persons who do not indulge to great excess. "*Many persons*," says Dr. Macnish, "*cannot get slightly intoxicated without having an epileptic or other convulsive attack.*" These fits generally arise in the early stages, before drunkenness has got to a height.¶

Dr. Trotter relates an instance, of a gen-

* Essay on Drunkenness, p. 64.

† Anat. Melancholy, Part I., Sect. 2.

‡ Anatomy of Drunkenness, p. 68.

|| Ibid. p. 159.

§ Essay on Drunkenness, p. 116.

tleman, an acquaintance of his, who was subject to what he terms *periodical apoplexy*, and who had so frequent a recurrence of the disease, that he could foretell to his relations the exact period of a new paroxysm. After each attack, certain paralytic affections commonly remained. This gentleman had not the *apoplectic make*, was upwards of seventy years of age, was accustomed to much country exercise, and *always very moderate in the use of wine*. At this time, however, he could not take two glasses without defect of voice and speech and stupor coming on. In this situation, he had upwards of thirty distinct fits of apoplexy, the greater part of which Dr. Trotter himself witnessed. In one of them the patient died.*

Dr. Trotter also tells us of a woman, who was much given to spirituous liquors, and when intoxicated, was often seized with a convulsive motion in the muscles of the lower part of the face, which sometimes induced a dislocation of the lower jaw. Violent emotions of passion usually brought on these convulsions. The common people attributed the luxation as a punishment from heaven for her profane swearing, as inability to speak was of course the consequence of the accident.†

IV. *Delirium tremens, or brain fever of drunkards.*—*Delirium tremens, or delirium with tremor*, forms one of the most appalling of the catalogue of diseases brought on by intemperance. *Paraphronia*, a synonyme of delirium is derived from *παρά erroneously*, and *φρονέω I understand*, an erroneous state of the mind. This disease is more or less fatal in its consequences, in proportion to the previous habits and constitution of its victims. Those persons are the least likely to recover, whose systems have, for a considerable period, laboured under incessant excitement from the free use of spirituous liquors. To produce this condition of the system, it is not necessary that an extreme degree of intoxication be superinduced. It is not unusual for individuals to be capable of attending to the concerns of life with some degree of propriety, and yet be in such a state, that at some favourable opportunity, this terrible disease shall suddenly display itself in all its terrific characters. By some medical writer, delirium tremens has been considered as “forming a sort of connecting link between mania and fever.”‡ Armstrong remarks, that “in persons whose constitutions have been broken down by the long use of of ardent spirits, the simple typhus is now and then accompanied with fits of wild and almost maniacal delirium.”||

Dr. Burrows speaks of delirium tremens as “a sympathetic affection of the organ of intelligence, arising from a morbid action of the stomach, and probably of the liver also,

produced by the stimulus of ardent spirits.”* The same writer remarks that diseases of the hepatic system will even originate delirium, furious mania, melancholy, and suicide. He discovered a condition of the liver in the bodies of several poor lunatics which favoured this inference. Dr. Cheyne mentions the prevalence of hepatic disease, upon examining the bodies of lunatics who had died in the hospitals of Dublin.†

Pale countenance, weakness, languor, emaciation, want of appetite, coldness of the hands and feet, cold moisture over the whole surface of the body, cramp in the extremities, slow pulse, giddiness, nausea and vomiting, with extreme anxiety about the most trivial circumstances, combined with frightful dreams, are among the most prominent of those painful and distressing symptoms, which stamp the character of this disorder, and indicate its awful approach. The mind becomes indescribably harassed with phantasies of the most hideous and unnatural description. Objects most calculated to produce loathsome and horrifying feelings, keep the unfortunate sufferer in a state of inexpressible disquietude and anxiety. At one period, for example, they imagine disgusting vermin to be creeping about the body; at other times, dangers of an appalling description, are looked upon as holding out prospects of momentary destruction—while the most alarming suspicions are entertained, even of those, who, under different circumstances, were esteemed as valued relations and friends.

Dr. Pearson, an able writer on this subject, relates a case of delirium tremens, where the patient for a considerable time previous to his death, imagined that he saw the devil at the ceiling above his bed, and as the disease drew near its rapid termination, he fancied the evil spirit approached him with a knife to cut his throat, and actually expired making violent efforts to avoid the terrible instrument.

Under judicious medical treatment, this disease is, in general, controlled. But when it is neglected, or improperly treated, it is almost certain to have a fatal termination. The patient, in this event, is not unfrequently carried off in convulsions. *Delirium tremens*, however, may terminate, either in decided madness, or confirmed idiotism; to either of which, perhaps, death would be a preferable alternative.

A modified species of this disease is exceedingly common among those who are habitually addicted to intemperate habits. It is attended with considerable nervous derangement, and spectral illusions, of a peculiarly unpleasing character. The same symptoms, although in a diminished degree, are often witnessed after even moderate vinous indulgence, as the nervous depres-

* Essay on Drunkenness, p. 111.

† Ibid. p. 118.

‡ Armstrong on Fever, p. 310.

|| Ibid. p. 31.

* Burrows on Insanity, London, 1828, p. 325.

† Ibid. p. 94.

sion, and tremulous appearances which follow, clearly demonstrate.

Delirium tremens, has, of late years, become a disease of common occurrence. Dr. S. Jackson, of America, states, that he has treated upwards of 200 cases. Dr. Carter, one of the resident physicians of the Philadelphia alms house Infirmary, in a paper published in the American Journal of Medical Sciences, informs us that in that establishment there were, from November 21st, 1828, to February 1st 1829, seventy cases of *mania a potu*, and from June 19th to September 10th 1829, seventy five cases ; making no less than 145 cases in six months.

Dr. Ware has seen more than one hundred cases of this disease, and Dr. Wright asserts that he has received in the Institution at Baltimore, from sixty to seventy cases annually. Dr. Copland, however, thinks many of these cases have not been the true *delirium tremens*, but those delirious affections which immediately follow after intoxication. The amazing consumption, of spirituous liquors in America owing to their cheapness, is, it may readily be supposed, a sufficient reason for the appalling prevalence of this disease in that country. A striking additional example is found in a statement made by Dr. Bailey, the founder,

and one of the medical officers to Somerset Hospital, Cape Town. During the first two years after the establishment of that hospital (1819 and 1820,) there were admitted 620 patients. Out of that number, only four were cases of *delirium tremens* ; from the 26th of May, 1827, to the 30th March, 1830, a period of two years and ten months, during the administration of Dr. Bailey's predecessor, Mr. Laing, there were thirty-three cases of that disease. During the year and nine months, which preceded January, 1832, there had been admitted 1050 patients, of which there were (arising chiefly from drunkenness) of *delirium tremens*, 55 ; diseased livers, 400 ; ulcers, 200 ; pulmonary consumptions, 60 ; maniacs, 21 ; making a total of 763 cases. During the period stated, there were 83 deaths ; eight out of ten, by *post mortem* examination, showed that their deaths were occasioned by intemperance.*

The statistical reports of our troops in the East and West Indies, and in British America, present woful evidence of the effects of intemperance on the Brain and nervous system.—The following table embraces a selection of the returns from two districts.

* South African Commercial Advertiser 1832.

DISEASES OF THE BRAIN AMONG THE TROOPS AT

WINDWARD AND LEEWARD ISLANDS, AND UPPER CANADA.

Diseases.	Admitted.	Died.	Proportion of Deaths to Admission.	Admitted.	Died.	Proportion of Deaths to Admission.
Inflammation of the Brain {	108	8	1 in 13½	22	5	1 in 4½
Headache	127	1	1 in 127	66	0	0 in 66
Stroke of the Sun	6	0	0 in 6	0	0	0
Water in the Head {	3	2	1 in 1½	2	2	1 in 1
Apoplexy	159	83	1 in 2	88	28	1 in 3
Paralysis	106	10	1 in 10½	60	8	1 in 7½
Epilepsy	325	22	1 in 15	215	10	1 in 24½
Fatuity	83	5	1 in 16½	30	1	1 in 30
Madness	104	6	1 in 17½	19	0	0 in 19
Brain Fever of Drunkards }	1,426	175	1 in 8	296	18	1 in 16
Total	2,447	312	1 in 8	822	72	1 in 11½

The admissions and deaths in this class of of these were cases of *delirium tremens*, the diseases in the Windward and Leeward Islands are about four times as high as among the same number of troops in Great Britain. Considerably more than one half, however, direct consequence of intemperance. Deducting these, the admissions and deaths were only about double those which occur in Britain from the same cause ; and, as the

writer of the Report says, "Many even of these no doubt originated in drunkenness, though not so reported." He also remarks, "this shows that the influence of a high temperature in increasing the prevalence of mortality of this class of diseases is by no means very great."* In reference to British Guiana, the author of the Report remarks, "the ratio of deaths by diseases of the brain is unusually high; more than one-half of them, however, have been from *delirium tremens*, the consequence of drunkenness, for which, unfortunately, this colony affords many facilities."†

Delirium tremens is most destructive in tropical regions. Not more than half as many died from this disease at Gibraltar, in the course of nineteen years, as in the Mauritius, during one year alone, out of half the strength. It must, however, be remarked that in tropical climates intemperance is more common, and carried to a greater extent.

With regard to the Bermudas, in which station fully one half of the cases, and nearly the same proportion of deaths, arise from delirium tremens, if these, the result of the soldiers' own imprudence, were deducted, "the others would be found comparatively rare, notwithstanding the high temperature to which these islands are subjected for several months of the year.‡

In the whole of the West India stations, the cases of delirium tremens are almost altogether confined to European soldiers. The cases among the Black troops are comparatively rare. The same fact is found to exist in regard to our troops at Malta, as compared with the more temperate natives of that island. The diseases of the brain among our troops at Malta, admitted into the hospital from the year 1817 to 1836 (the aggregate number of troops being 40,826) were 236, of which 38 were cases of delirium tremens. In the returns of the civil population of Malta, from 1822 to 1834, (exclusive of Goza, &c.) the aggregate population for 13 years being 1,303,517, *not a single case of madness or delirium tremens is recorded.*|| What a contrast does the following record of the causes of death (in a Nominal Roll, transmitted to the Medical Department) present of those who died between 1825 and 1832, in the Veteran Companies, Canada. These companies were chiefly composed of men advanced in life, but of drunken habits. Died, by suffocation from drinking, 10. Delirium tremens, 15. Apoplexy, principally from intoxication, 15. Found dead, supposed from the same cause, 2. Drowned, ditto, 2. Contusion, ditto, 1. Making a total of 44 deaths *directly* produced

by intemperance. Died by diseases, most of which were either produced or aggravated by habits of intemperance, 56. Total deaths from 1825 to 1832, inclusive, 100. These statistics might be enlarged to a considerable extent.

V. *Madness and Idiocy* are, in the present day, in particular, common, but deplorable consequences of intemperance. A fit of intoxication is, in reality, a state of temporary madness, followed, as it usually is, by striking imbecility. The diseases in question are the result of a similar and permanent action on the brain and nervous system. Seneca, wisely observes, *Ebrietas est voluntaria insania*. drunkenness is a voluntary insanity. Dr. Conolly observes, that the temporary delirium which forms the delight of the drunkard, is, too often, but the forerunner of the long-continued, or permanent aberration of the maniac, or the drivelling imbecility of the demented, or the idiot.*

Dr. Pritchard remarks, that in public lunatic asylums in England, it is generally known that, in a great proportion of the cases, dram-drinking is the exciting cause.†

Mr. Poynder, who was for thirty years clerk both to the Bethlehem and Bridewell Hospitals, states, with respect to the former, from a weekly attendance upon the Subcommittee during that period, "about half, *at least half*, those who come into the Committee-room, and concerning whom it has been inquired by the governors present, or by the physician, what they supposed to be the causes of insanity, the larger proportion I should certainly say, to be from that cause; it has been stated to be from the cause of drinking."‡

Dr. Ellis, resident physician at the County Lunatic Asylum, Middlesex, remarks, that the use of fermented liquors, and particularly of spirits, is very conducive indeed to the bringing on insanity; it first of all acts on the stomach, then on the nervous system; it brings on diseased action, disorganization of the brain is the consequence, and all the dreadful results of insanity follow.||

In a Report presented to Parliament, a few years ago, and printed by order of the house, it appears that the pauper lunatics and idiots in the several counties of England and Wales, amounted to very nearly 10,060 in number. 5,145 of these were females. By adding to this number the amount of lunatics ascertained to be confined in public and private asylums, and those in the army and navy; a total is produced of 13,665, a mass, which according to Sir Andrew Halliday, is three times greater than it was twenty years ago.

Out of 495 patients admitted into a lunatic asylum, in Liverpool, 257 were ascertained to have come to that state through intem-

* Statistical Rep. on the Sickness and Mortality among Troops in the West Indies. p. 9. 1838.

† Ibid. p. 16.

‡ Statistical Report on the Mortality of Troops, in the United Kingdom, Mediterranean, and British America, p. 9.

|| Ibid. Appendix, Abstract. No. 3.

* Provincial Medical and Surgical Journal. 1842.

† Pritchard on Insanity. p. 205.

‡ Parl. Evid. p. 64.

|| Ibid. p. 46.

perance.* Dr. Ellis states, that out of 28 recent cases admitted in 1834, into the Hanwell Asylum, Middlesex, 19 were known to be drunkards.† In the same asylum, the number of patients increased in one year from 825 to between 1100 and 1200, principally in consequence of the increase of gin drinking. The Report of this hospital for 1834, states as follows: "The 76 deaths which have occurred in the year, have been, (with the exception of those who died with advanced age) principally caused by the disease of the brain and of the lungs, and the complaints brought on by those deadly potions of ardent spirits, in which the lower classes seem, more than ever, to indulge. In a very great number of men and women, the insanity is caused entirely by spirit drinking." The last report of this asylum (as presented in the late documents of the Metropolitan Commissioners in lunacy) gives the following as the chief exciting causes of this disorder:

Males. Intemperance, 60; Epilepsy, 24; Paralysis, 14; Poverty, 22; Domestic Unhappiness, 8; Grief, 4; Disappointed Affections, 4; *Females.* Intemperance, 9; Epilepsy, 19; Paralysis, 9; Poverty, 22; Domestic Unhappiness, 19; Disappointed Affections, 11.

This table shows that among the poor who form the inmates of this Institution, females are most subject to insanity from moral, and males from physical causes. "One of the most melancholy features of the Commissioners Reports," remarks a valuable authority, "both as respects the county and metropolitan asylums, is the increase of insanity from intemperance."* This fact accords with the late decided increase of spirit drinking among the operative classes.

The following table, recently published, presents a selection of the chief causes of insanity in patients admitted into the West Riding Lunatic Asylum, Yorkshire, during the last 20 years. *Intemperance*, 342; *Domestic Affliction*, 123; *Anxiety of Mind*, 24; *Disappointed Love*, 62; *Fever*, 34; *Injury of the Head*, 36; *Jealousy*, 34; *Misfortune in Business*, 19; *Poverty and Distress* 75; *Pecuniary Disappointment*, 52; *Purpura*, 34; *Religious Anxiety*, 108; *Study*, 24; *Unkindness of Husbands*, 26.†

The following interesting and valuable document, drawn up by Dr. C. C. Corsellis, of the Lunatic Asylum, Wakefield, February 29th, 1840, exhibits the number of cases, male and female, admitted into a variety of hospitals, from drunkenness,

Number of Patients admitted into the following Asylums, with the per-centage of admissions caused by intemperance.

		No. of Patients.	From Intemperance.		Total.	Per Cent.
			M.	F.		
Glasgow,	1838,	* 117	18	13	31	26.49
Do.	1839,	113	19	5	24	18.32
Aberdeen,	1837 & 38,	48	6	2	8	18.00
Do.	38 & 39,	58	4	1	5	9.43
Edinburgh,	36 to 39,	203	11	13	24	11.53
Dundee,	36 to 37,	40	2	1	3	7.50
Do.	38 to 39,	53	3	2	5	9.43
Wakefield,	1838,	183	34	11	45	24.59
Do.	1839,	159	18	2	20	12.57

* 117 admitted—of these 31 were insane from intemperance: making 26.49 per cent. from this cause.

The proportion of insane in Scotland, was, some years ago, nearly three-fold to what it was in England. From a return made by the Scotch clergy, in 1818, it appears that the number of lunatics and idiots in that country was 4650, which, allowing for omissions, as some parishes made no returns, the proportion at that time would be about two-and-a-half to every 1000 of the population. In England, the highest estimate never

exceeded one in 1200. An accurate and valuable work, published at that period, states, that "the excessive and increasing use of spirituous liquors amongst the lower ranks of the people, is justly to be considered as the great cause of this, as well as other diseases to which they are liable."‡

In Ireland, also, spirit-drinking has been

* Facts and Figures. No. 4. p. 61. 1842.
† Yorkshire Gazette, 1841.
‡ Statistical Survey of Scotland, vol. v. p. 139.

* Parl. Evid. p. 144
† Ibid. p. 46.

found to be a most fruitful source of madness. Dr. Hallaran, who, for upwards of twenty years, attended one of the largest establishments in that country (Cork Hospital), for the reception of the lunatic poor, thus remarks: "So frequently do cases of furious madness present themselves, arising from long-continued inebriety, there is no occasion to inquire the cause, the aspect of the individual, at first sight, being sufficient to expose its well-known ravages."*

In the minutes of evidence appended to the Report of the Committee of the House of Commons, on lunatic poor in Ireland, the increase of lunatics in that country was stated, and attributed to the hereditary nature of the disease, and to "the increased use of spirituous liquors, which produces insanity."†

By a statement of Dr. Crawford (in 1830), it appears that the following has been the result of an inquiry recently made at the Richmond Lunatic Asylum, Dublin. The number of patients then in confinement was 286; viz., 120 males, and 166 females; of these, there were no less than 115, whose illness was known with perfect certainty, from the *acknowledgment* of their relatives and friends, to have been occasioned by drinking of whiskey; fifty-eight of whom were males, and fifty-seven females. "There is no doubt, whatever," remarks Dr. Crawford, "that a great many more might be added to the same number, as is evident, by the general appearance of many, and the character of their disease, although positive information concerning their habits of life cannot always be obtained; the relatives being unwilling, from a sense of shame, to admit that they were intemperate." "They often, indeed, evince a singular degree of moral perversion on that subject, confidently asserting that the unfortunate sufferer was a *model of temperance*, when, on closer inquiry, it will frequently appear, that he was in the habit of taking a good many glasses of whiskey in the day, but was, *notwithstanding, considered perfectly sober*, because he never indulged so far as to be unable to attend his work." "I feel confident," adds Dr. Crawford, "that I am keeping within the strict bounds of truth in stating, that at least one out of two of the patients now in the asylum have become insane in consequence of the abuse of ardent spirits; and I know that the same has been observed in the other public lunatic asylums in Ireland." One class labour under various forms of *melancholy, partial hallucinations, impaired mental powers, loss of memory, complete fatuity, delirium tremens, and various forms of paralysis*. Those thus affected are mostly habitual tipplers, who have long indulged in the habit of

taking ardent spirits in sufficient quantity to keep up a moderate degree of excitement, but seldom, perhaps, if ever, exceeding so as to produce actual intoxication. This is probably the most dangerous mode of drinking, and also the most common; people encourage themselves in it by applying, as a *quietus* to their reproving consciences, the deceitful excuse that they stop short of getting drunk: they thus go on, requiring, as they proceed, a gradually increasing quantity of liquor to keep up the delusive enjoyment; their short intervals of abstinence from drink are attended with intolerable feelings of distress, despondency, and remorse, until at last they are reduced, often in the prime of life, to the degrading condition of drivelling, besotted imbeciles, with constitutions broken down by a variety of hopeless and loathsome complaints. *There is seldom an instance of recovery from any of the forms of insanity produced in this manner.**

Dr. Mollan, the medical attendant of the Richmond Asylum, states, that out of 610 cases of persons confined there, no less than eighty were known to have originated directly, and eighty more indirectly, from intoxication; and he supposes a similar number from the counties of Meath, Westmeath, Louth, and Dublin, received without certificates, but from symptoms and appearances were traceable to the same source. This statement is said to be under the average.

Insanity does not prevail to so great an extent in France as in the British nation. It appears, from the statement of Dr. Bayle, that between the 1st of January, 1815, and the 1st of January, 1823, there were received into the Royal Hospital, at Charenton, 847 male, and 606 female, lunatic patients; of this number the proportion of cases arising from intemperance was one to fifteen among the men, and one to one hundred and forty among the women. The calculations, however, of Dr. Hallaran show a widely different proportion in the Cork asylum; being one to three among the men, and one to six among the women. These included those cases alone, the origin of which could be accurately ascertained; but supposing the entire number of patients in the asylum be included in the calculation, and that every case where the cause could not be traced be placed on the list of those which had not arisen from intemperance, the proportion would still be one to six among the men, and one to twelve among the women; that is, in relation to France, more than double the number as regards the male sex, and nearly twelve times the proportion as respects females.

The observations and experience of Dr. Esquirol exhibit a still greater disparity.

* Practical Observations on the Cause and Cure of Insanity, by W. S. Hallaran, M.D., p. 26., 1818.

† Parliamentary Papers, vol. viii., p. 12., 1817.

* A Second Letter on Wine and Spirits, by Dr. Cheyne. Appendix, p. 21.

Out of 336 patients submitted to his care in the neighbourhood of Paris, he found three only whose insanity was attributable to excessive drinking; while, according to Dr. Hallaran, at the Cork lunatic asylum, out of 383 male patients, 103 had been reduced to that melancholy state from the effects of intemperance.

The Reports of the Paris hospitals, (*Compte Rendu*, &c., 1826,) however, do not make so large a disproportion as in the cases above stated. Out of 2507 insane cases, which included the entire number in the hospitals of Paris, 185 are stated to have become so by drunkenness, or about one in thirteen and a-half. In Cork, the cases were one in four, where the causes of the disease could be ascertained, and one in eight on the entire.

It has almost invariably been found, that in the lunatic asylums in France and Italy, the female inmates considerably preponderate over the males. This arises, of course, from peculiar causes, which need not more particular attention.

At the Cork asylum, however, the proportion of the sexes was found to be nearly equal; whilst in most other similar institutions in that country, the males preponderated.

It is inferred, from these statements, that some cause of insanity was in operation among the male sex in Ireland, which did not exist in France and Italy.

Fifty-nine lunatics were admitted into the Somerset hospital, Cape of Good Hope, between the years 1824—1830; of this number twenty were reduced to that state by drunkenness. "The principal exciting cause appears to be continued inebriety; nearly one-third of the cases admitted may be traced to this fertile source of disease."*

In America, also, intemperance has been found to be equally productive of insanity. Dr. Waters states, that while he acted as house pupil and apothecary to the Pennsylvania hospital, the madness of one-third of the patients confined by this terrible disease had been occasioned by the use of ardent spirits.†

Dr. McDonald, late physician of the lunatic asylum at Bloomingdale, New York, states, that more than one-fourth of the patients of that institution are brought there from the sad effects of inebriety. Professor Francis adds, that a close inspection of many hospitals for the treatment of the insane, both in America and in Europe, long ago convinced him that inebriety was the prolific source of mental aberration.‡

Dr. J. V. Rensselaer, of America, states, that, in his opinion, nearly one-half of the

cases of insanity which come under the care of medical men in that country arise, more or less, from the use of strong drink.

Ten drunken maniacs were admitted into the lunatic asylum, Bellevue, New York, in one week; a greater number than died in the city of hydrophobia in fifty years.*

In the second annual Report of the Trustees of the state lunatic asylum, Worcester, Massachusetts, it is stated, that in the year 1834 there were admitted 272 patients. Out of more than forty different causes of insanity, under which the number of the patients are affixed, are extracted four of the highest proportions, exactly as they are published in the Report. These are—

Intemperance .. 56	Fanaticism..... 13
Ill health..... 18	Family troubles 11

The annual Reports of the superintendent of this institution, during the last five years, show, that 128 have been received into it, whose insanity was produced by intemperance.†

Intemperance is thus seen to be thrice more productive of insanity than the most prolific of all the other causes in the table in question. It is known, moreover, to be the principle cause of *ill health* and *family troubles*, together with many other reasons generally stated in public documents, as strong inducements to mania. It is more than probable, that great numbers of individuals are rendered insane, who have in general borne a character of temperance and sobriety. They drink freely, but not to a state of visible intoxication. The excitement thus occasioned to the nervous system, on some favourable opportunity (and perhaps to the surprise of friends and relations), breaks out into fierce and incurable insanity.

VI. *The brain* is admitted by all to be the organ of the mind. All organic changes of this viscus are found to be accompanied with corresponding derangement in its functions. In cases of insanity, for example, pathologists almost invariably find striking manifestations of structural disease in the brain. Spurzheim informs us, that he *always* found changes of structure in the brains of insane persons. Dr. Haslam, Georget, and Greding, make similar statements. Mr. Davidson, house-surgeon to the Lancaster county lunatic asylum, examined with much care the heads of not less than two hundred patients who died in the asylum, "and he scarcely met with a single instance in which traces of disease in the brain, or its membranes, were not evident, even when lunacy was recent, and a patient died of a different disease."‡

A recent writer, who examined the heads of more than one hundred individuals who

* South African Quarterly Journal, No. III., p. 244.

† Inquiry into the Effects of Ardent Spirits, by Dr. Rush.

‡ Bacchus, American Ed., Appendix, p. 467.

* Address of New York Temp. Soc., 1829.

† Rep. of American Temp. Soc., p. 34, 1838.

‡ Observations on Mental Derangement, by Andrew Combe, M.D.

died from insanity, came to the following conclusions :—

1. That in the brains of those who die of insanity, changes of structure will always be found.

2. That these changes are the consequences of inflammation, either acute or chronic.

3. That there exists a correspondence between the symptoms and the organic changes ; and that the names, monomania, mania, &c., ought only to be employed as representing degrees and stages of inflammation of the brain.*

Inflammation of the brain, chronic and acute, is a common consequence of intemperance. The brains of all habitual drunkards exhibit, more or less, some change in structure. In certain cases the substance of the brain itself exhibits either a preternatural hardness, or unusual softness. At other times, the vessels which ramify on this delicate fabric manifest essential organic alterations. The membranes of the brain, also, undergo similar destructive changes. Dr. Percy, as the result of his interesting experiments, was led to suggest “the *probability*, or rather the *possibility*, that the phrenetic inflammation was produced by the contact of irritating alcoholic liquor with the cerebral substance.”† The post mortem appearances of drunkards certainly make this supposition extremely probable.

The dissections of Morgagni throw much light on this subject. He found, in a considerable number of cases which came under his observation, that the brains of drunkards exhibit the same alterations from healthy structure as are found in the brains of lunatics and idiots. The substance of the brain in some was much firmer than usual in its consistence. *Tamen ea firmitudine cerebrum fuit, ut durius ad id tempus a me dissectum esse non meminissem.*‡ In others it was more flaccid. *Portio cerebelli flaccidi erat, &c.*|| The cerebrum and cerebellum were more soft. *Cerebrum et cerebellum moliora, &c.*§ The cerebrum, cerebellum, and nerves, were all extremely flaccid. *Cerebrum, cerebellum, et nervi, summa erant flaccidate, &c.*¶ The substance of the brain was yellow and soft, and also appeared corrupted. *Substantia cerebri flava ac flaccida quæ corrupta videbatur, &c.*** The bony deposits and gypseous concretions, also, observed by the same eminent writer, have already come under our notice (p. 212).

Mr. Pilcher, at a recent meeting of the medical society, London, held January 31st, 1842, related a case of delirium tremens, which occurred in a woman 35 years of age,

who had been a gin-drinker. The patient sunk in a state of epileptic convulsion. The arachnoid membrane of the brain was found opaque; some spots of sero-fibrine were found in its cavity. The structure of the brain was healthy, and more than usually blanched. The membranes and arteries were turgid. There was a large quantity of straw-coloured fluid in all the ventricles; and a deposit of atheromatous matter between the coats of the basilar and internal carotid arteries, which vessels were generally hardened. The heart was very large, the left ventricle was very thick, and the right auricle large, but not thickened. The aortic valves were thickened, but the coats of the artery were healthy. The left lung was adherent to the walls of the chest.—Some fluid was found in the spinal column, which might explain the cause of the epilepsy. Mr. Pilcher also related the case of a man, who was 50 years of age, and a hard drinker, who died of apoplexy. The basilar, carotid, and vertebral arteries were completely ossified.*

Professor Francis observes, that “the brain of the intemperate is the rallying point of much disorganising action. Dissections have shown preternatural fulness of a venous character; the membranes of the brain gorged with blood; in some instances, where the patient has perished from protracted delirium tremens, traces of the inordinate operation of the poison have been most distinctly seen at the basilar, or inferior portion of the skull, and a highly vascular or surcharged state of the whole brain, but more especially of the pia mater, with serous effusion between it and the arachnoid tunic. The substance of the brain itself is generally more or less invaded by serum, and hence the uncommon moisture of its cut surface: in the lateral ventricles as well as at the base of the brain large quantities of serum have also been remarked.”† Professor Francis, after making reference to those cases in which alcohol has been found in the cavities of the brain, remarks, “I have repeatedly had cases partaking much of the same character, falling under my own inspection. Upon removing the bony covering of the brain, the exhalation of ardent spirits on several occasions was strongly manifested to the olfactories of the by-standers, as also the effused fluid conspicuous for its quantity and quality.—On one occasion, while holding an inquest over the body of a drunkard, suddenly cut off, some spectators who entered the room where the anatomical examination was made, asked, what puncheon of rum we had opened. It is worthy of record, that these effusions of serum, from peculiar circumstances, as by injury from falling, or blows inflicted, in some instances, take place most rapidly. I

* Archives Generales de Medicine, 1825.

† Experimental Inquiry, p. 50.

‡ De Causis et Sedibus Morborum, lib. i., Epist. iii., 6.

|| Lib. i., Epist. ii., 22. § Lib. i., Epist. iii., 6-16.

¶ Lib. i., Epist. v., 11. ** Lib. i., Epist. xi., 6.

* Lancet, 1842, p. 663.

† Bacchus, American Ed., p. 468.

have known five ounces of serous fluid taken from the lateral ventricles of a gross drunkard, within two short hours after his zig-zag pedestrian movements were arrested by an accidental blow on the head. What portion, indeed, of so copious an effusion existed in the cerebral organ while life still sustained its controlling influence, I am at a loss to calculate. The occurrence is, nevertheless, instructive, because it shows us that the citadel of thought may become the receptacle of agents, whose influence is at war with the wholesome exercise of the mental faculties; predisposes to extreme mobility in the nervous system; and, from the slightest causes, urges on, with perhaps an irregular, but yet certain issue, to the complete dethronement of all its noble prerogatives. Other post obit examinations of a similar sort might be stated, corroborative of this sad condition of the brain, whose manifestations of deranged sensation, too clearly showed how far removed from a sound condition were the faculties. Hence the sudden invasion of palsy, of epilepsy, and of apoplexy, occurring in many after a debauch; hence, on some occasions, upon an investigation into the morbid anatomy of the structural part of the brain itself, we discover a preternatural softness of its substance, a pulpy disorganization, (*romollissement*), and that its texture has lost its distinctive peculiarities, not unlike the specimens of disorganization ascertained in some fatal cases of malignant typhus.* After some comments on the connexion between mental action and these diseased conditions of the brain, Professor Francis observes: "No intellectual faculty suffers so severely and so generally as memory, in this deranged state of the brain; no *memoria technica* can supply the loss occasioned by habitual inebriation. He who indulges in the spring-time of life in alcoholic potations will assuredly find, in the autumnal period, his strongest recollections but the feeble vestiges of by-gone associations, whether of words or things. Conversing on a particular occasion with a distinguished character of pre-eminent renown in his walk of life, and expressing my surprise at the tenacity of his memory, considering his abuse of the intellectual faculties by pernicious indulgence, he disclosed to me the mortifying truth, that he could no longer commit a new reading, that the studies of to-day were forgotten on the morrow; 'but Shakspeare I retain (add she), with undiminished freshness, his language is so *adhesive*.' Notwithstanding this adhesive-ness, Othello was but a blank in this great tragedian's recollections, ere his career closed. [Professor Francis alludes to the late Edmund Kean.] To adopt the surgeon's phraseology, there is a solution of continuity in the powers of ratiocination and of memory in the brain of the drunkard."†

The loss sustained by mental faculties, in brains so disorganized, need excite little surprise. The drunkard, to use the language of Shakspeare, "loses the immortal part of himself, and what remains is bestial." The seat of thought presents a melancholy wreck of its former vigor and health, and the unfortunate victims of inebriation sink either into a state of confirmed idiotism or incurable madness.

SECTION VII.

THE EFFECTS OF INTOXICATING LIQUORS ON WOMEN AND CHILDREN.

WOMEN ought not to drink wine or strong drinks, which are bad for men, but an hundred-fold worse for women.---TRYON.

All kinds of strong drinks are abomination unto the natures of children.---IBID.

O madness to think use of strongest wines
And strongest drinks our chief support of health,
When God, with these forbidden, made choice to
His mighty champion, strong above compare, [rear
Whose drink was only from the limpid brook.
MILTON.

- I. WOMEN. 1. Peculiar temperament of Females.
2. The effects of Intoxicating liquors during gestation, and immediately after confinement.---3. Hysteria, &c., and diseases incident to peculiar periods natural to the sex.---4. The use of strong drink during lactation.
- II. CHILDREN. 1. Peculiar temperament of Children.---2. Disease and mortality of Children induced or aggravated by the use of strong drink.---3. Testimonies of eminent medical writers on this subject.

I. WOMEN.—1. *Peculiar temperament of Females.*—This subject, in a physical point of view, is of paramount importance. The peculiar temperament of females in many respects renders them more susceptible of the influence of stimulants. The sedentary habits of this class, unlike the more active avocations of the male sex, are ill-calculated to promote a vigorous condition of the corporeal functions. These facts were well known to the ancients, who deemed the subject not unworthy of legislative enactments. The laws of the Romans, Massilians, Milesians, and other ancient nations, interdicted their women from the use of wine. Ancient writers represent these laws as having had their origin in the fear of lewdness. The responsible duties of females, as *mothers*, doubtless, also had its influence. Tryon, after adverting to the injurious influence of strong drink, and particularly in reference to women, remarks: "The ancients direct those of that sex to observe an higher degree of temperance and order than they prescribed to men, as knowing that the whole welfare and preservation of mankind did chiefly depend on their good or ill con-

*Bacchus, Amer. Ed., pp. 168-9. †Ibid., pp. 169-70.

stitution. The food, therefore, appointed to them was simple and natural, . . . and pure water for drink ; which are endued with simple and equal natures, and have affinity with the *feminine nature*, having no manifest quality that does too violently predominate, therefore have no unequal operation, but do administer both dry and moist nourishment, far beyond all *high prepared foods and strong drinks*. For all sorts of meats and drinks do *beget their likenesses*, and for that reason simple things have in all ages been commendable, especially for women.* And again, "Women ought not to drink wine or strong drinks, which are bad for men, but *an hundred-fold worse for women*. If our women were but sensible of the ill-consequences of their frequent sipping of strong drinks, they would be as far from doing it as those in other countries, there being hardly any women in the known world that are such great drinkers and lovers of strong liquors as the English: neither are any so turbulent, fiery, and masculine-spirited ; and accordingly they are troubled with various diseases, to which the women in other countries are strangers."†

2. *The effects of intoxicating liquors during gestation, and immediately after confinement.*—The pernicious influence of alcoholic drinks during *gestation* was a subject of no less early remark. It has, indeed, received the stamp of Divine inspiration. The mother of Sampson was commanded to abstain from all inebriating liquors. The angel of the Lord interdicted the use of "wine and strong drink" to Elizabeth, the mother of John the Baptist. Both were men not only distinguished for mental endowments, but bodily vigor. Tryon is not singular in his accusation of female proneness to strong drink in England. Sir Walter Raleigh made a similar declaration. Tryon's remarks were published at the latter end of the 17th century; Sir Walter Raleigh flourished at the commencement of the same century, and termination of the one preceding, embracing the greater part of the reign of Elizabeth, and the former part of that of James. He thus writes in reference to Sampson, and the circumstances connected with his birth, as related in Holy Writ :—"The angel of God forbad the wife of Manoah, the mother of Sampson, to drink wine or strong drink, or to eat any unclean meat, after she was conceived with child, because *those strong liquors hinder the strength*, and, as it were, *wither and shrink the child in the mother's womb*. Though this were even the counsel of God himself, and delivered by his angel, yet it seemeth that *many women of this age have not read, or at least will not believe, this precept; the most part forbearing*

neither drinks nor meats, how strong or unclean soever; filling themselves with all sorts of wines, and with artificial drinks far more forcible: by reason whereof so many wretched feeble bodies are born into the world, and the races of the able and strong men in effect decayed."*

It is melancholy to reflect on the nature and extent of female intemperance in this country in the present day, and its effects on the young. The diet of the mother undoubtedly influences the health of her offspring. The child inherits, to a remarkable extent, the physical temperament in particular of its maternal parent. It is, in truth, blood of her blood, and flesh of her flesh. On the conduct of mothers, therefore, depends, to a great degree, the vigor and health of the rising generation. Observation and experience demonstrate the truth of this position. The children of gin-drinking or wine-bibbing mothers, who reside in our larger towns, present a melancholy appearance when compared with the offspring of mothers who enjoy the pure air and exercise of our agricultural districts. The one exhibit the usual signs of health combined with a due development of the physical powers: the puny, sickly aspect of the other is calculated to excite emotions of painful regret and commiseration. Mr. Poynder remarks, "I have observed that the children of dram-drinkers are generally of diminutive size, of unhealthy appearance, and sickly constitutions."† Dr. Dods, in reference to the appearance of children at their birth, the offspring of intemperate parents, says, "The infant has frequently not merely a want of healthy aspect, of plump, round outline, but a starved, shrivelled and imperfect look."‡ An old writer, cited in a work of modern date on the evils of strong liquors, relates several examples in point. In regard to one lady, in the flower of her age, he remarks, "The effect it had upon her miserable offspring was lamentable. She had several children born, strongly marked with the emaciating consequences of the mother's fault; but they died in the month. The unfortunate victim of intemperance at last herself died of her first child by a second marriage, just as the unhappy infant was brought into the world, dead, shrivelled, and discoloured as the former."§ In another case, "the child, after several months' so-called existence, had the look of an old withered baby; its skin was loose and wrinkled, for it had no flesh; it was no larger than one of a month old, and no more able to walk or stand than it was at that age; and yet," says the writer, "it lives, if we may say *lives*, by the help of art, a miserable memento of its wretched mother's unnatural habit."§

* Way to Health, Long Life, &c.

† Ibid., p. 283.

* History of the World, chap. xv., sect 1., p. 263.

† Parl. Evid., p. 423. Appendix. ‡ Ibid., p. 219.

§ Inquiry into the Effects of Fermented Liquors. By Basil Montague, Esq., p. 83.

§ Ibid., p. 85.

These illustrations, although conveyed in homely language, are literally correct, as the author can testify by actual observation.—The observation of other medical men in our manufacturing towns is conclusive of the same fact.

The influence of intemperance on the offspring of drunken parents has been considered in a previous section. (p. 202.) Thousands of children exist, in the present day, miserable martyrs to disease, enfeebled both in mind and body, the result of their parents' unlawful indulgence. The subject is of vast importance in several points of view, and admits of extended investigation. Dr. Brown makes the following important remarks: "The drunkard injures and enfeebles his own nervous system, and entails mental disease upon his family. His daughters are nervous and hysterical; his sons are weak, wayward, eccentric, and sink insane under the pressure of excitement, of some unforeseen exigency, or of the ordinary calls of duty. This heritage may be the result of a ruined and diseased constitution, but is much more likely to proceed from that long-continued nervous excitement, in which pleasure was sought in the alternate exaltation of sentiment and oblivion, which exhausted and wore out the mental powers, and ultimately produced imbecility and paralysis, both attributable to disease of the substance of the brain. How far the monomania of inebriety is itself a disease, and may be more the development, the consummation, than the commencement of an hereditary tendency to derangement, this is not the place to point out; but there is every reason to believe that it not only acts upon, and renders it more deleterious, whatever latent taint may exist, but *vitiates or impairs the sources of health for several generations*. That the effects of drunkenness are highly inimical to a permanent healthy state of the brain, is often proved at a great distance of time from the course of intemperance, and long after the adoption of regular habits. Some time since, I was called upon to treat a remarkably fine boy, about sixteen years old, among whose relations no cause of derangement could be pointed out, and for whose sudden malady no cause could be assigned, except puberty and a single glass of spirits. His father, however, had been a confirmed drunkard, was subject to the delirium and depression following inebriety, and died of *delirium tremens*. The boy recovered. His case presented many points of interest. His head increased rapidly, and the two hemispheres were of unequal size. The disease was intermittent; the patient passing a week in furious incoherent madness, and the succeeding week in perfect tranquillity and consciousness. These states were separated or connected by a short and profound sleep or lethargy, differing altogether from the patient's ordinary sleep, and recognized by

him as the culminating point of his disorder. At present I have two patients who appear to *inherit* a tendency to unhealthy action of the brain *from mothers addicted to drinking*; and another, an idiot, whose father was a drunkard."*

Dr. Farre observes, "that he has seen an over-stimulated nurse injure the *body* and the *intellect* of a child."†

It is a common but erroneous notion that females during the months of pregnancy require more generous diet, in other words, that at this period there is a drain upon the constitution which demands a proportionate amount of nutritious supply. This popular fallacy frequently leads to the use of alcoholic drinks, and its correspondent evils. Nature herself, however, provides for these extra occasions, and it is seldom necessary for pregnant females to depart from their usual moderate diet. "Nothing," says Dr. Combe, "but harm can result from attempting to 'support the strength' by too nutritious a diet."‡

The influence of stimulants on the mother during pregnancy, as regards *the consequences to herself*, is a subject of considerable importance. Multitudes of females have to attribute their ill health during this period to the use of strong drink. Women who reside in the country, who breathe pure air, are subject to daily and moderate exercise, and abstain altogether from rich food and alcoholic liquors, not only enjoy better health than those who live in crowded districts and partake of rich food, but have easier confinements, in addition to freedom from many of those unfavourable after-consequences which perplex and annoy the medical attendant.

Dr. Eberle, an experienced and judicious writer, remarks that "the pregnant female, who observes a suitable regimen, will, *cæteris paribus*, always enjoy more tranquillity, both of mind and body, and incur much less risk of injury to herself and child, than she who, giving a free rein to her appetite, indulges it to excess, or in the use of improper articles of food."||

Dr. Combe makes the following sensible remarks: "There is no period of life at which it is of so much consequence to observe moderation and *simplicity* of diet, and avoid the use of heating food and stimulants, as during pregnancy; not only is the general system then unusually susceptible of impressions, and apt to be disordered from the slightest causes, but, in nervous constitutions, the stomach is the seat of a peculiar irritability, accompanied by a craving and capricious appetite, to which it requires much good sense and self-denial on the part

* Dr. Brown on Hereditary Tendency to Insanity.

† Parliamentary Evidence, p. 102.

‡ Management of Infancy, p. 87.

|| Diseases and Physical Education of Children. Cincinnati, 1833.

of the parent to refrain from giving way, and which sometimes leads inconsiderate persons to much excess in both wine and food. I have known young females hurt themselves by wine, taken in consequence of this craving, and their imaginary weakness.*

The consequences of injudicious diet, during pregnancy, usually exhibit themselves soon after confinement. The calls upon nature are, at this period, very great. Much, therefore, depends on the constitution and health of the patient. A well regulated previous regimen is best calculated to secure a safe and speedy recovery.

The practice of administering stimulating liquors to females, immediately after confinement, is fraught with the most serious consequences. At this period the body labours under considerable excitement. The usual symptoms of febrile disturbance, accompanied in most cases with extreme physical prostration, indicate the want of perfect quiet, and a regimen suited to the irritable state of the system. Hence the injurious influence of alcoholic stimulants.

The use of stimulants after confinement, has been interdicted from the earliest period. Pliny prohibits the administration of wine at this period under any ordinary circumstances.†

Dr. Burns, Regius Professor of Surgery, Glasgow, remarks on this subject: "Another bad practice is, the administration of stimulants, such as brandy, wine, or cordial waters. I do not deny, that these, in certain cases of (he evidently refers to extreme) exhaustion are salutary; but I certainly maintain, that generally they are both unnecessary and hurtful, tending to prevent sleep, to promote hæmorrhage, and excite fever and inflammation."‡ Professor Burns then gives direction for the employment of a suitable aqueous diet, and adds, "but malt liquor should be avoided." In reference to this subject, Dr. Hamilton observes: "When the great sensibility of the stomach, and the extensive influence which it has over the whole body, are attentively considered, the impropriety of exhibiting stimulating substances in the irritable state of a female after confinement, will be very striking. If it be evident, by the flushing of the face, &c., that a glass of spirits, even in women in health, increases the velocity of the blood, it must be obvious that more violent effects will be produced by the same cause when the body is weakened and irritable." When thirst exists, Dr. Hamilton recommends the use of gruel, toast and water, cow milk, whey, lemonade, tamarind and apple tea, barley water, and other similar diluents. In summer to be taken cold, and in winter slightly warmed. Other

medical writers recommend a similar practice.

The use of inebriating liquors after confinement is a common source of intemperance.

In the Annual Report of the Directors of the Lunatic Asylum, Glasgow, for 1829, among other causes of insanity we are told, that "not a few females came to that condition through the use of palatable cordials administered to them remedially, and especially, during in-lying, by kind but injudicious friends." The evil consequences resulting from this practice are unfortunately but too common.

Dr. Leake remarks: "I have seen, with the deepest concern, several instances of women, otherwise amiable, who have fallen victims to the slow consuming poison of spirituous liquors, secretly conveyed by nurses into the lying-in bed chamber of the patient, on the pretence of their being cordials."*

"It is high time," says Dr. Bell, of America, editor of the Journal of Health, "for every intelligent physician to pointedly set his face against the introduction of spirituous liquors into a house, and, above all, into the nursery, under any pretext whatever. Failing to do so, he becomes, in a great measure, responsible for the drunkenness of nurses, the fevers and inflammations of mothers by hot caudles, and the deaths of infants by the addition of ardent spirits into their food; for even to this pitch of folly and barbarity have some nurses and mothers reached before now."†

3. *Hysteria, &c., and diseases incident to peculiar periods natural to the sex.*—Many diseases, in the present day, peculiar to females, may be attributed to the use of intoxicating liquors, and in particular those which are found among the poor. These evils, however, are not unknown among the higher ranks of society. Hysterical affections are among the most common of those induced by female wine-bibbing. This class of disorders exists to an extent not contemplated by the non-professional portion of the community. "Females," remarks Dr. Cheyne, "affected with hysteria, with scarcely an exception, consume, three, four, or five glasses of wine in the day, their inconsiderate fathers, husbands, or brothers, ever pressing them to take wine. When I prescribe a regimen for such patients, I generally prohibit the use of wine, and this promotes their recovery more than ammonia, valerian, assafoetida, or any of those remedies which are thought to act powerfully on the nerves, and which certainly do act powerfully on the first pair (olfactory). Very often will the patient ask if she must of necessity drink wine, as her friends seem anxious to make her a drunkard; and when

* Management of Infancy, p. 91-2.

† Pliny, Hist. Nat., lib. xxiii., cap. 1.

‡ Principles of Midwifery, p. 410.

* Chronic Diseases of Women, 1777.

† Journal of Health, vol. lii., p. 172, 1832

I reply, that she must not have wine, nor any kind of strong liquor, she expresses the utmost gratification, declaring that she had all along felt that wine disagreed with her stomach, causing flushing, and a degree of feverish irritability, and aggravating every distressing symptom of her complaint, and that it will be the greatest relief to her possible to be allowed to give it up." "Be it remembered also," adds the same experienced physician, "that in men, and more especially in studious men, that species of nervousness, which so much resembles hysteria, is often maintained by the daily use of fermented liquors, even in a moderate quantity."*

Dr. Beddoes observes: "The quantity of wine, small as it may appear, which many women allow themselves, deserves separate mention, as it is probably not without its influence in rendering them dyspeptic and low-spirited. If it be, in any case, true that the effect of intoxicating fluids is not to be estimated by measure only, but also by the state of the person who takes it, it must be true in regard to inactive, delicate, and nervous females. In them the digestive organs may be as much injured by a glass of wine, as in a robust man by a pint. I have repeatedly known the head, in such females, to be most disagreeably affected by a small glass of port wine and water. The operation of the mixture has been completely *narcotic*, as much so as that of opium or digitalis ever is, not the slightest exhilaration having preceded the sense of heaviness and stupefaction. The parties thus affected have always found themselves better under a course of *total abstinence* from vinous liquors."†

These remarks are confirmed by the everyday experience of medical men.

The class of diseases incident to peculiar periods natural to the sex are not unfrequently aggravated to a serious extent by the use of intoxicating liquors. Restless hours and indescribable torture, in unnumbered instances, result from the too common practice of administering stimulants to relieve the pain occasioned by suppressed secretions. Many females have to date confirmed ill-health to this ill-judged and pernicious practice. These remarks apply to the moderate use of alcoholic drinks.

Dr. Trotter observes, that "irregular menstruation, with all its evils, and abortion, in the early months of pregnancy, are the frequent consequences of inebriation in the fair sex."‡

4. *The use of strong drink during lactation.* During lactation the demands upon nature, both by day and by night, are sometimes most exhausting. Sleepless nights, and days of

harassing excitement, produce a wear and tear of the system which requires a suitable and nutritious diet.

It has been shown in previous sections, that intoxicating liquors do not add to the strength of the system. They act merely as stimulants, and exhaust the animal powers in proportion to the strength and quantity in which they are taken. As sources of *strength* therefore, they are of no value. They cannot supply that nutrition which alone forms the source of natural and permanent strength. Alcoholic liquors propel the organs of nutrition and lactation to increased action, but it is an action unnatural and injurious in its effects. The organs employed in these important functions are regulated by laws, on the due performance of which depends the fulfilment of nature's intentions. Thus, for example, nutritious food forms the only natural stimulant for the healthy action of the stomach, and is the sole fountain of pure blood. Pure milk, which is essential to the health of the child, depends upon proper digestion. If the functions of the stomach act imperfectly, the secretion of milk must, as a necessary consequence, be defective. Hence, whatever deranges the functions of the stomach, interferes with the healthy lactation.

The influence of alcoholic liquors on lactation may be considered in several points of view. In the first place, they interfere with healthy digestion. In this way the *quality* of the milk secreted becomes deteriorated in exact proportion to the amount of injury inflicted on the organs of nutrition. In the second place, they influence the *quantity* of the secretion. The vessels employed in this function, urged on by an alien impulse, produce an unusual and enlarged supply. It does not follow, however, that an increase in the *amount* of secretion is attended with a proportionate increase in the *quantum of nutriment*. The contrary is often the case. Milk may be secreted in large quantities ill calculated to supply the ends of nature. Hence numbers of puny emaciated children, the offspring of parents who indulge in strong drink.

The milk of cows fed with the refuse wash of the London distilleries, which contains a small portion of spirit left, even after the most careful distillation, exhibits evident signs of the deterioration in question. The object of the dairyman, however, is attained. The wash stimulates the lactatory vessels to inordinate action, but, as a necessary consequence, the milk is proportionably less fitted for nutrition; *the flesh of the animals is less wholesome, and they are remarkably short-lived, being worn out in two or three years.*

Alcoholic stimulants are commonly administered in cases where the functions of the stomach from some cause or other flag, or when the vessels employed in lactation indolently perform their office. Experience

* Letter on Wines and Spirits, p. 6.

† Hygeia, or Essays Moral and Medical, by Thomas Beddoes, M.D., 1802.

‡ Essay on Drunkenness, p. 117.

shows that, under such circumstances, inebriating liquors in all their combinations are, as remedial agents, inefficient and injurious. Remedies may be administered, whether in the form of stimulants or otherwise, which will produce the object in view with equal if not better effect, and without those unpleasant consequences which follow the administration of alcoholic liquors.

Imperfect lactation in most cases, depends on improper diet. The stomach of the invalid is often loaded with rich and indigestible food. As a natural consequence, disordered digestion, with all its attendant evils, ensues. "Many mothers," remarks Dr. Combe, "in their very anxiety to keep up a copious secretion of milk, put an entire stop to it. Imagining that a rich diet must necessarily furnish the best supply, because it contains a greater quantity of the elementary materials from which milk is formed, they live so fully as to induce an inflammatory state of the system which is highly adverse to this in common with all other secretions."* Other sources of ill-health are often in action at the same time, and produce similar results. Among these we may include mental perturbation, the absence of pure air, appropriate exercise, inattention to the state of the bowels, irregular hours, and confinement in close rooms, and numerous other springs of mental and bodily ailments. Under such circumstances it is obvious that proper digestion, and, as a necessary consequence, proper lactation, cannot take place. The proper secretion of milk then depends upon a due performance of the bodily functions. Attention to the common requisites of health is essential to healthy lactation; and a parent, who is anxious to possess a supply of nutriment fitted to maintain her infant in health and strength, must determine to regulate her mode of life and diet in accordance with the dictates of reason and common sense.

Dr. Combe strikingly corroborates these views. "It is from overlooking," he remarks, "the necessity, on the part of the mother, of a rigid observance of the laws of health, that the flow of milk is often greatly lessened, or even arrested, in a country nurse suddenly transplanted into town. Accustomed to open doors, a constant free circulation of air, much bodily activity, and the healthy digestion of a moderate meal, the nurse is suddenly transferred to a warm house, whose well-fitted windows and doors exclude the fresh air, and where, although she has no longer any direct call to active exertion to excite a natural appetite for food, she is nevertheless encouraged to eat largely and frequently, and often to indulge in the use of stimulants to which she has never been accustomed. Is it wonderful that, under such circumstances, the

digestive powers should give way, and the bowels become disordered, the general system deranged, and the secretion of milk either deteriorated in quality, or altogether stopped? Or, rather, could human ingenuity devise a more likely means to impair it, were such the aim we had in view? If any mother, who may happen to read these pages, should still remain unconvinced of the propriety of adhering to a simple and unstimulating diet while acting as a nurse, I would earnestly direct her attention to the unquestionable fact, that the best and healthiest nurses are to be found among women belonging to the agricultural population, who, although actively employed, and much in the open air, scarcely ever taste solid animal food, or fermented liquors of any kind, but live principally on soups, tea, and vegetable and farinaceous food. Among mothers so circumstanced, it is rare to meet with one who experiences any difficulty in nursing her child; and many of them have milk enough for a second infant. This result is of itself sufficient to prove that the best supply of healthy milk is to be derived, not from a concentrated and highly nutritious diet, but rather from one consisting of a due proportion of mild vegetable, farinaceous, and liquid food, with a moderate allowance of meat, *without either wine or porter*. Even as regards the quality of the milk, there can be no doubt that a mild diet is of great advantage. The milk derived from the use of concentrated food is too thick, rich, and stimulating for most infants."*

The common use of stimulants during lactation implies a doubt in the wisdom of the Divine architect, who provides by natural means for those extra drains on the system which suckling calls into exercise. This extra expenditure is met by an admirable provision of nature. The customary monthly discharge is not only suppressed during this period, but an increase of appetite ensues, the demands of which should be supplied with plain and wholesome food. These and other equally potent facts convince us that women are naturally endowed with those requisite resources which maternal duties demand. It is a libel on the God of nature to suppose otherwise.

Facts, however, and experience, determine this question beyond all controversy. If we take an equal number of females who suckle children without the aid of intoxicating liquors, and compare them with the same number who indulge, however moderately, in alcoholic stimulants, it will be found that the former possess considerable advantage over the latter, whether we regard the quantity or quality of the secretion. A comparison of females, as we have

* Physical and Moral Management of Infancy, by A. Combe, M.D., 1841, p. 207.

* Ibid., p. 210-11.

seen, who reside in the country and subsist on plain, unstimulating diet, with those who reside in towns, and partake of rich food, places this fact in a still stronger light. Multitudes of rustic females in our own country, and whole tribes or nations in foreign climes, who never, on any occasion, indulge in stimulating drinks, suckle their children without any inconvenience. The habits and condition of the brute creation presents no inapt or unprofitable illustration.

A great abundance of additional facts and arguments might be adduced in corroboration of these views. A few illustrations, however, will suffice to substantiate the above statements.

Dr. Trotter, whose experience on professional matters was, perhaps, inferior to none, observes: "The food of women, who suckle their own children, is often very improperly selected. The quantity of the milk, not the quality of it, is studied. It is a well-known fact, that this secretion partakes very much of the nature of the diet that is used, that is to say, certain particles pass through the breast unassimilated. All drinks containing *ardent spirit*, such as wine, punch, caudle, ale and porter, must impregnate the milk; and thus the digestive organs of the babe must be quickly injured. These must suffer in proportion to the delicacy of their texture; and the diseases which flow from this source are certainly not uncommon. Physicians who have prescribed a diet and regimen for nursing mothers, have not sufficiently attended to the hurtful effects of wine and malt liquors. Porter is generally permitted in large quantities on these occasions, a beverage highly improper and dangerous."*

Dr. Macnish remarks: "Women, especially in a low station, who act as nurses, are strongly addicted to the practice of drinking porter and ale, for the purpose of augmenting their milk. This very common practice cannot be sufficiently deprecated. It is often pernicious to both parties, and may lay the foundation of a multitude of diseases in the infant. The milk, which ought to be bland and unirritating, acquires certain healing qualities, and becomes deteriorated to a degree of which those unaccustomed to investigate such matters have little conception." "The properties of opium, tobacco, and other narcotics," remarks *Dr. Macnish*, "are communicated to the child in the same way."†

Dr. Orley, of London, at a meeting held in the metropolis, made the following remarks: "He had seen the greatest evils result from the use of ardent spirits and other liquors, while nursing. He had been in extensive practice as an accoucheur, and in all cases where he could prevail on his

patients to drink only milk, or gruel, or barley water, he had been successful in producing much comfort and a speedy restoration to health. The fever, the pain, the anxiety, and the restlessness so often complained of, arose, in almost all instances, from the use of ardent spirits; and mothers should be very cautious what kind of nurse they engaged. *Dr. Anderson*, a very able and experienced lecturer on midwifery, used to say to the students, 'Whatever you do, never recommend a nurse that smokes tobacco; for if she smokes she will be sure to drink; and if she drinks she will not fail to recommend it to her mistress.' He believed that the evils done to females by intoxicating liquors were greater than those done to males by the same practices."

Mr. Higginbottom, of Nottingham, surgeon, at a meeting held in London, in the course of an excellent speech, remarked: "He begged, in conclusion, to say a word to females. It was very common for them, when urged to join this society, to say, 'What are we to do about suckling? We are then obliged to take ale.' Perhaps nothing could be more preposterous than such an idea. Did the various suckling animals ever take such things? What would be thought of an old woman who should give her cow a gallon of ale, under the idea that it would then be better able to suckle its calf? One of his most respectable patients had given up the use of all fermented drinks, and one consequence was, that not a single dose of physic was put down to her account in his day-book. She had a very fine child, and the mother and child were both doing remarkably well. 'But what, then, are we to suckle with?' it would be said. His reply was, 'With good beef and mutton to be sure.' If they would have puny, weak, sickly children, let them drink ale, and other drinks containing alcohol, and, according to the usual plan, give the children a portion also. He met with a woman, aged 93, who, in the course of her life, had suckled twenty-four children, of her own or other people's, some of the principal families of the place. He found that she had not used any fermented drinks. He asked her what she had taken? Her reply was, 'Broth, or whey, or milk.' She was a fine, tall, stout, healthy, old woman, and bid fair to live one hundred years. He had often greatly regretted to find females who, according to their age, ought to be in the very prime of life, worn out, in consequence of their taking stimulants so freely, to assist them, as they supposed, in suckling their children. He earnestly advised them not to take another drop: they might feel a little low at first, but a little barley broth, and good beef and mutton, would prove most effectual restoratives."

Mr. Samuel Courtney, surgeon, R.N., of Ramsgate, remarks: "At our last meeting, eleven nursing mothers presented themselves

* Essay on Drunkenness, p. 150.

† Anatomy of Drunkenness, p. 241.

with their children, every one of whom had nursed her child on total principles; and healthier or finer children I have never seen; and did all mothers pursue the same system, we should in a dozen years see very few such puny, rickety, diseased children, as so often meet the eye in the present day. I know many mothers, who, the first five or six days after their confinement, have enjoyed excellent health, but as soon as they have returned to the use of malt liquors, either themselves, or their children, or both, have become unwell—a penalty, surely, of the mother's infringement of the laws which govern the human constitution; for when we consider that the alcohol contained in these liquors goes directly into the mother's milk, unchanged, and from thence, in the same state, into the infant's stomach, how I would ask, can any other effect be expected?"

Mr. Beaumont, surgeon, of Bradford, says: "I have observed that those females who have abstained from alcoholic drinks during the period of pregnancy, have usually enjoyed an immunity from many of the most distressing symptoms incident to this period. Those mothers who have not addicted themselves to the use of wines, or malt liquors, during lactation, have most happily proved the utter fallacy of those vulgar prejudices, by which an opinion has so generally obtained, that they were absolutely necessary for maintaining the proper quantity of milk."

Dr. James C. Ferrier, of Leamington, observes: "With respect to the influence of alcoholic beverages on nursing mothers, and their infants, I may state, that my own wife suckled our two former children, and is now suckling our third child, without their use, and a better nurse or more thriving children are not in Britain."

Mr. William Tothill, surgeon, Egham Hithe, in the following document, shows that total abstinence from inebriating liquors during lactation is not only compatible with delicacy of constitution, but a valuable aid to health. "For the furtherance of the very laudable operations that are now making to discourage the use of all intoxicating liquors, I am induced, quite voluntarily, to state, that my late wife, who was a woman of delicate constitution, was enabled to nurse her whole family of eight children, and most of them for nine or ten months, without drinking any thing stronger than milk and water. She did not in the whole course of her life drink a quart of beer." "The whole of the children are now living, and in health, with the exception of one who died in her thirteenth year. My own opinion, from long practical observation, is, that any general beverage stronger than water is seldom necessary; that any thing stronger, except medicinally, is oftener injurious than beneficial; and that a total disuse of all alcoholic liquors would make a

greater change for the better, in the moral and civil condition of mankind than all other known remedies whatever."

One writer remarks: "A case has come immediately under my notice (and I am happy to find, by inquiry, that it is not a solitary one,) of a young woman who has taken nothing during her confinement of an intoxicating kind, under any shape, neither in drink nor food, the place of it having been supplied by broth and tea, coffee or gruel, occasionally. The baby is now six months old, and for four months lived entirely upon the breast, and does now, in a great measure, being fed only twice a day on baked flour boiled in milk. The mother is in excellent health; and the baby, the youngest of five children, is a more healthy, lively, and engaging child than the others were in their infancy."

Two or three additional individual examples will now suffice.

"I am now nursing," say one female, "my eighth child, and the *third* upon the principle of total abstinence from all intoxicating liquors; and, having formerly drank both ale and porter while similarly circumstanced, I can bear my unqualified testimony in favour of nursing without the use of any such stimulants; my own health is good, and I never had a finer or more healthy infant than that which is now the object of my care."

"It is now nearly three years," says another female, "since I left off drinking any thing of an intoxicating nature (except when prescribed by my medical adviser), during which time I have nursed two children, neither of whom were weaned till they were more than nine months old, nor had any other kind of nourishment than that which they derived from me, except when occasionally left for more than two hours at a time. I am induced to state this for the encouragement of mothers who may feel timid at making such an experiment; and can assure them, that, if their children thrive upon such a mode of treatment as well as mine have done, they will never have any cause to repent having adopted total abstinence principles."

The following testimony of ten mothers who nursed without the aid of alcoholic drinks, and who appended their names to the original document, together with the number of children nursed with intoxicating liquors, is important and conclusive: "We, the undermentioned, having fully tried the total abstinence principle, and having formerly drank both ale and porter, while nursing, can bear our unqualified testimony in favour of nursing without the use of any such stimulants; our own health is good, and we never had finer or more healthy infants than those which are now the objects of our care."

These cases might be multiplied to thousands, such is the amount of evidence now

collected on this subject. Numerous examples have come under the author's own observation.

II. CHILDREN.—1. *Peculiar Temperament of Children.* The tender frame of infancy and youth led the ancients to interdict the use of wine until an advanced stage of life. At these precarious periods the organization of the human frame is not duly developed; the muscular fibres are comparatively lax and delicate, and the nervous and vascular systems predominate. Trivial causes quickly excite a dangerous state of the body during the *period of growth*. Every thing in particular which interferes with the functions of nutrition exercises at this time a most important influence. Hence, legislative enactments with reference to the use of strong drink at a juvenile age.

Athenæus and Cælian both inform us that it was a strict law among the Romans that no male should drink wine until he had attained the age of thirty or thirty-five years.* The prohibition as regards women was absolute during every stage of life. The Spartans endeavoured to instil into the minds of their children a deep-rooted abhorrence of drunkenness.† Plato forbade young persons to taste wine at all until they were eighteen years of age.‡ The laws enacted by King Constantine the Second of Scotland, at Scone, A.D. 861, not only interdicted the use of all inebriating liquors to young persons of either sex, but enacted the punishment of death to every individual who was found guilty of infraction of the law.||

Traces of these ancient acts of legislation are discernable in the manners and customs of continental nations in the present day. Burton, in some allusions to these laws, remarks, that the custom, in relation to "young folks, is still practised in Italy and some other countries of Europe and Asia; as Claudius Minos hath well illustrated in his *Comment on the 23d Embleme of Alciatus*."§ Howell, in his *Familiar Letters*, relates a very interesting circumstance, which will serve as an illustration. "In Germany," he remarks, "and all France over, 'tis held a great part of incivility for maidens to drink wine until they are married. The German mothers, to make their sons fall into hatred of wine, do use, when they are little, to put some owl's eggs into a cup of Rhenish, and sometimes a live eel, which, twingling in the wine while the child is drinking, so scares him, that many come to abhor and have an antipathy to wine all their lives after." Mrs. Trollope, in the present day, assures us, that, in Vienna,

among the circles of the highest *ton*, "a young lady cannot touch wine of any kind, without materially tarnishing the delicacy of her high breeding thereby."

Much additional evidence might be adduced on this interesting subject. The anxiety manifested by parents, in olden times, for the welfare of their tender offspring, strangely contrasts with the practices of the present day. Christians, in this respect, may peruse with advantage the records of heathen legislation.

2. *Disease and mortality of Children induced or aggravated by the use of strong drink.* Disease and mortality exist among children at the present time, to a most fearful and lamentable extent. The reflective reader may pertinently inquire, Is this state of things in accordance with design? Did the all-wise architect of the human system constitute the youthful and tender frame subject to those grievous and fatal influences which render infant existence so precarious? Observation and experience confirm the negative position. The period of childhood, indeed, would be one of comparatively little danger, were mankind to comply with the requirements of health in the physical education of the young.

A few statistical facts will best suffice to strengthen these views. The "Annual Reports of the Registrar-General of Births, Deaths, and Marriages, in England," for the years 1838 and 1839, recently issued under the authority of Parliament, show, from the returns of the whole of England and Wales, that *rather more than one-third of the total deaths occur under two years of age*. The exact proportion is 342·54 per 1000 of the deaths registered.* In Manchester, out of every 1000 *deaths of males, not less than 496 are of children under three years of age*.† In the same town, out of 9276 deaths, 2384, or about *one-fourth*, occurred under one year of age; 3680, or more than *one-third*, under two years; and 5145, or considerably more than *one-half*, under five years of age.‡ "Taking the average of the various countries," remarks Dr. Combe, "of civilized Europe, where science has made the greatest advances, and the comforts of life are most abundant, and where the treatment of the young is considered the most rational, *two out of every nine infants ushered into the world die within the first year*."|| Assuming, according to the same judicious writer, seventy years as the natural term of life in England, *one-third of the race is cut off within the first two years of existence*.

The comparative mortality of diseases mainly affecting the young, in town and country, may be estimated from the following table from the same authentic sources:—

* Cælian., Var. Hist., lib. ii., cap. xxxviii. Athenæus, lib. x., cap. vii.

† Plutarch, in *Instit. Laconicis*.

‡ Plato, de *Legib.*, lib. ii.

§ Hect. Beet., lib. x.

§ Anatomy of Melancholy.

* Registrar-General's First Report, &c., p. 45.

† Ibid., Second Report, p. 9.

‡ Ibid., p. 19.

§ Management of Infancy, p. 10.

Out of a population in London, of 1,594,890.		Out of a popu- lation in the Counties, of 1,599,024.	
<i>Measles,</i>	mortality 1354	..	only 404
Hooping-cough, ..	1066	..	302
Teething, ..	477	..	78
Convulsions, ..	1717	..	652
Cephalitis, ..	294	..	92
Diarrhœa, ..	394	..	227
Pneumonia, ..	1630	..	592
Totals		6932	2347

The above table shows that the diseases which chiefly affect young persons are three times more fatal in a population of equal number in the metropolis than in the country.* In *pneumonia* alone, nearly two-thirds of the deaths occurred in infancy.†

Insalubrity of the atmosphere and *improper diet* doubtless constitute the main sources of this excess of mortality in towns. In many respects, such as in regard to higher wages, good dwellings, warm clothing, and an adequate supply of nutritious food, the inhabitants of towns possess advantages over those resident in the country. The latter class of individuals, however, breathe a purer atmosphere, and indulge less in those pernicious habits which unfortunately prevail in town populations: among these, the use of inebriating liquors occupies the most prominent position.

The influence of the mother's habits on the child has been considered in this and previous sections. It is a subject, however, which cannot receive too frequent or serious attention. A few additional particulars will now be submitted to the reader.

It is an undoubted fact that *the previous health of the mother exercises an important influence on her offspring*. A great variety of facts testify the truth of this position. Dr. Combe remarks, that "a very influential source of delicacy in children is, a *habitually deteriorated state of health in the parents*, not exactly amounting to active disease, but arising chiefly from mismanagement or neglect, and showing itself in a lowered tone of all the animal functions, and a general feeling of not being well."‡ Habitual indigestion is, perhaps, the most prevalent source of this condition, and, in particular, that disordered state of the digestive functions which is produced by the use of alcoholic drinks. The imprudence of the mother in this way entails upon her innocent offspring physical tendencies which prove the bane of after existence.

One serious feature, in reference to the mother's habits during pregnancy, is the fact that *the seeds of disease may lie dormant in the child's system for an indefinite period, until some favourable circumstance occasions*

its development. Dr. Eberle, in his excellent Treatise on the Diseases and Physical Education of Children, assures us, that, "although the new-born infant may appear to enjoy a good state of health, it frequently happens that the disease or predisposition contracted during gestation remains latent or dormant for months, or even years, after birth, before it is developed; and thus there may be an appearance of a sound and healthful state of the constitution, during infancy, although the seeds of disease may be deeply deposited in the system."* This fact will be found to be of considerable importance in reference to the present investigation.

The use of alcoholic liquors may seriously influence the child through the medium of the mother's milk. This influence may be effected in two ways. Every thing which impairs the health of the mother necessarily deteriorates the health of the child. The use of intoxicating liquors materially affects the quality and quantity of the milk, and the child's health, as a necessary consequence, proportionably participates. A dose of castor oil or other purgative, as familiar experience proves, taken by the parent, speedily exercises a corresponding effect on the infant at the breast. Can we wonder, therefore, that stimulants so strong in their nature as brandy, gin, wine, and porter, should exercise an equally if not more important influence? A vast amount of evidence testifies the fact. The properties of tobacco, opium, and other narcotics, are communicated to the tender nursling in the same manner. There are, however, strong grounds to suppose that the mother's milk, in particular, in cases of hard drinking, may be charged with alcohol, and her offspring suffer from the more immediate contact of the poison. One case, within the author's recollection, corroborates this view. A female, with an infant at her breast, at an unusually early hour of the morning, before she had broken her fast, drank, quickly after each other, several glasses of ardent spirits. In a remarkably brief space of time, the child was seized with painful vomiting, such as is commonly manifested on the presence of any virulent poison. Dr. North observes, that children nursed by intemperate females are peculiarly liable to derangements of the digestive organs, and convulsive affections. With reference to the latter, he informs us, that he has seen them almost instantly removed by the child being transferred to a temperate woman.† These observations might be strengthened by the introduction of numerous cases. They are, however, of too common occurrence to need more than simple reference.

The pernicious practice among the poor, in

* Reg.-Gen. First Report, Table C., p. 110.

† Ibid., First Report, p. 74.

‡ Management of Infancy, p. 70.

* Diseases and Physical Education of Children, p. 3.

† Practical Observations on the Convulsions of Infants.

particular, of mixing small portions of fermented or distilled liquors in the food of infants, cannot receive too severe condemnation. It is the source of numerous ailments, and is certain, sooner or later, to destroy the system of the most healthy and vigorous child. When it becomes necessary, either from necessity or time, to wean the infant, its food ought to consist of articles which approach as near as possible to the mother's milk. Certainly no two substances can well be found more dissimilar in character than alcohol and human milk. The fiery deleterious nature of the one contrasts very forcibly with the mild, nutritious character of the other. It is a fact, testified by everyday experience, that if alcoholic liquors are injurious to adults, they are tenfold more so to infants and children.

It is a common practice with idle parents or nurses to administer stimulating liquors, or quack medicines composed principally of laudanum and spirits, to soothe restless children. This is the source of considerable disease and mortality among infants. The uneasiness in question, in nine cases out of ten, arises either from disordered bowels, attributable to the administration of improper food, or to the lack of proper nursing. Spirits and narcotics are found to lull them to sleep, but the consequences are fatal. "It is well known," says Dr. Trotter, "that nurses, if they can deserve that name, are in the practice of giving spirits, in the form of punch, to young children to make them sleep. The effect cannot fail to be hurtful. Such children are known to be *dull, drowsy, and stupid, bloated in the countenance, eyes inflamed, subject to sickness at stomach, costive, and pot-bellied*. The body is often covered with *eruptions, and slight scratches are disposed to ulcerate*. To these bowel complaints may be added."*

The period of teething is one of considerable anxiety to the parent. It is, however, a process of nature, and if the child's health be uninfluenced by impure air, or improper food, it is found to be a process of safety. A reference to the Registrar-General's Second Report forcibly corroborates this statement. The comparative mortality in town and country, from teething and convulsions, is as follows:—

	In the cities.	In the counties.
Teething	1257	204
Convulsions . . .	4337	1816
Totals	5594	2020

That is, nearly three times greater in the towns than in agricultural districts. The above relative proportions were taken from an equal population on the one part, in the large provincial towns, and on the other, in the northern counties.† An abstract from

the appendix of the Registrar's First Report, containing the causes of death, as registered in the thirty-two metropolitan unions, together with a corresponding abstract of the causes of death in five agricultural counties, shows that, out of an equal population, *the number of deaths in the metropolitan unions is six times greater than in those districts where the children breathe a purer atmosphere, and are more plainly fed*. The relative proportion in some other districts is even still greater.*

During teething, the natural irritability of the infant system is much increased. Hence, at this period, its peculiar susceptibility to disease. The diet of the child should be cooling and light. Animal jellies and broths should be interdicted, and it is often requisite even to dilute its usual vegetable and milk food. The mother or nurse must be equally careful in her diet, else serious consequences may ensue. The use of intoxicating liquors, either in the food or by the mother, excites the already irritable system to an alarming extent; and, if persevered in, occasions convulsions, and even inflammation of the brain. These remarks in particular apply to the acute or active stage of dentition. The comparative ease with which children plainly fed pass through the period of teething in the country, presents an instructive contrast to the weakly, irritable, and unhealthy offspring of crowded districts. The celebrated Locke long ago observed, "that flesh (and we may add, much more, inebriating liquors) should be forborne, at least till the child is two or three years old;" and that by this practice "children would breed their teeth with much less danger, be freer from diseases, and lay the foundation of a healthy and vigorous constitution much surer." Dr. Combe corroborates this remark. Children who are fed with rich food often become thin, feverish, and restless: a more plain and natural diet, however, soon dissipates those unpleasant symptoms.

These remarks apply with equal force to other complaints to which children are subject, such as measles, scarlet fever, whooping cough, and diarrhoea. Almost all the affections of children are of a highly inflammatory character, requiring the administration of cooling and unstimulating food. The system of a child under these circumstances is like a fire which a trivial cause soon fans into an inextinguishable blaze. Thousands of infants annually die from inattention to or ignorance of these facts. The chances of recovery from the inflammatory and febrile diseases of children depend for the most part on the child's previous habits.

One fruitful source of mortality among children is *the injudicious administration of stimulants and strong food during sickness*.

* Essay on Drunkenness, page 149.

† Registrar-General's Second Report, Table E.

* Ibid., First Annual Report, Table C, Appendix, p. 110.

The non-professional portion of the community, ignorant of the child's true state, often act on the supposition that the inflammatory symptoms have disappeared, and that the only treatment now necessary to pursue is, to supply the greatest possible amount of nutriment, with the view to recruit its wasted strength. This plan is attended with serious consequences. The feeble remains of the fever may again be fanned into a blaze, and a state of utter and irrecoverable prostration of the animal powers the consequence. "Almost all the disorders of infancy," remarks Dr. Combe, "as might be inferred from the predominance of the nervous and vascular systems at that age, are attended with more or less fever; and hence, as a general rule, a mild and moderate diet is required, even when the strength is much reduced. Stimulating or highly nutritive food, then, increases debility, by aggravating the febrile action; but, looking to the debility alone, parents and nurses think they cannot give too strong or too much nourishment. This is the source of much mischief, and of the occasional inefficacy of the best devised and most appropriate treatment."* It is an exceedingly common practice, in large towns, for parents, under these erroneous impressions, to administer to children large doses of home-made wines long before the inflammatory and febrile symptoms have disappeared. The consequences, as may be supposed, are extremely disastrous.

The restlessness and pain occasioned by this injudicious practice often lead to the administration of stimulating liquors. An overloaded stomach, whether in an infant or adult, soon becomes a weak stomach, unable adequately to perform its functions, and consequently the precursor of ill-health.—An ounce of food, slowly eaten, and well-digested, will afford double the nourishment derived from the same, or even a larger, quantity of food, eaten with haste, or partially digested by a stomach enfeebled with repletion. This fact cannot be too deeply impressed on the memory. Dr. Combe judiciously observes, that "Mischief is often done during the second year of life by over anxiety to strengthen the child with strong food, and the use of stimulants. This is a great error. In debility, arising from imperfect digestion or assimilation, or from an irritable nervous constitution, the milder the food, the more nourishment will it afford; and the stronger and more stimulating, the less likely will it be to restore the system to a healthy state."† This mode of reasoning accords with nature and common sense.

The state of the digestive functions in children exercises a paramount influence on their health, and their consequent capability

to withstand the attacks of disease. Mr. Sandford, in a publication on wine and spirits, relates the following experiment, which, remarks the celebrated Dr. Beddoes, "may be confirmed by thousands equally certain, though made with less precision:" "A late ingenious surgeon, occupied for a great part of his life in experiments equally well conceived, and accurately executed, gave to one of his children a full glass of sherry every day after dinner for a week.—The child was then about five years old, and had never been accustomed to wine. To another child, nearly of the same age, and under similar circumstances, he gave a large China orange for the same space of time.—At the end of the week, he found a *very material difference in the pulse, the heat of the body, the urine, and the stools of the two children.* In the first, *the pulse was quickened, the heat increased, the urine high coloured, and the stools destitute of their usual quantity of bile,* whilst the second had every appearance that indicated high health. He then reversed the experiment: to the first-mentioned child he gave the orange, and to the other the wine. The effects followed as before—a striking and demonstrative proof of the pernicious effects of vinous liquors on the constitution of children in full health." Dr. Beddoes informs us, that John Hunter, a name pre-eminently distinguished in medical science, was the individual who made this interesting experiment. It is most conclusive in its results.

The use of wine and spirits by children is a more immediately dangerous practice than most persons suppose. Golis, a celebrated physician of Vienna, informs us, that he himself witnessed three sudden deaths of infants in the arms of their mother, from Malaga wine administered with the view to strengthen them. "In this country," says Dr. Combe, "it is certain, that, among the poorer classes, many children fall victims to whiskey, or gin, administered with a similar view."* The writer does not entertain a doubt that thousands of children fall victims to strong drink from this cause every year.

The mortality of children, whose habits are controlled by attention to the laws of health, presents a remarkable contrast to the statistics extracted from the Registrar-General's Reports. Dr. Macnish informs us, that of the children of the Society of Friends—a class of people who are remarkable for their regular and temperate habits—one-half actually attain the age of forty-seven years,† yet a considerable proportion of these children reside in our large towns. The children in the Orphan Asylum of Albany present a still more instructive example. This excellent institution was opened towards the end of the year 1829, with about seventy children. The average,

* Management of Infancy, p. 331.

† Ibid., p. 311.

* Ibid., p. 316.

† Anatomy of Drunkenness, p. 151.

however, up to August 1836, subsequently amounted to eighty. An imperfect system of management was in operation for the first three years, during which time from four to six children, and sometimes more, were constantly on the sick list. One or two assistant nurses were necessary; a physician also was in attendance two or three times a week, and *the deaths amounted in all to between thirty and forty, or about one every month.* After this period the children were trained under an improved system, and the results were highly satisfactory and encouraging. The improved system, we may premise, included *abstinence from animal food and fermented liquors.* "The nursery was soon entirely vacated, and the services of the nurse and physician no longer needed; and *for more than two years, no case of sickness or death took place.* In the succeeding twelve months, there were three deaths, but they were new inmates, and diseased when they were received, and two of them were idiots." The superintendents state, in addition, that "since the new regimen has been fully adopted, there has been a remarkable *increase of health, strength, activity, vivacity, cheerfulness and contentment,* among the children; the *change of temper* is also very great. They have become *less turbulent, irritable, peevish, and discontented,* and far more *manageable, gentle, peaceable, and kind to each other.*"*

These facts, which might be strengthened by additional illustrations, lead us to conclude, that the adoption of a more natural and rational education of children would lessen, if not to a great extent remove, the lamentable amount of disease and mortality which prevails among the juvenile portion of our population.

3. *Testimonies of eminent medical writers on this subject.*—The following testimonies in support of the preceding observations, form a selection from a considerable amount of similar evidence:—

Dr. Trotter remarks: "It may be asked, At what age ought a child to begin the use of wine? To this I must reply, that spirits, wine, and fermented liquors, of all kinds, ought to be excluded from the diet of infancy, childhood, and youth. The use of these liquors is hurtful in proportion to the tender age in which it is begun. The parent who offers them to the infant, whatever may be the motives of tenderness, ought to weigh the consequences. If the babe were left to the instincts of nature, these articles would be the very last it would fix upon; their qualities are so diametrically opposite to the mother's milk."†

Dr. Garnett observes: "I shall say a few words on the pernicious custom of suffering children to drink wine, or other fermented

liquors. Nothing is more common than to see even very young children come to the table after dinner to drink a glass of wine. The least quantity produces violent effects on their accumulated excitability, and, by quickly exhausting it, ruins their constitution through life, and often renders them habitual drinkers. I can scarcely help attributing in some degree the many stomach complaints we meet with among young people in the present age, and which were unknown to our forefathers, to the abominable practice of suffering children to drink fermented or spirituous liquors. If these liquors be only a slow poison to us, they are a very quick one to them. A glass of wine, on account of the accumulated excitability of children, will have more effect upon them than a bottle will upon an adult accustomed to drink wine."*

Dr. Beddoes says: "There are an infinite number of facts which show that the organization of children is, in general, most apt to suffer from many classes of violent agents. Medical practitioners, much conversant among the poor, find them perpetually stinting the growth and destroying the constitution of their children, by their ill-judged kindness in sharing with them those distilled liquors which they swallow with so much avidity themselves. Among the causes so fatal to the health of the higher classes, the allowance of wine that is so often served out to the children, short as it may appear, deserves to be considered as not the least considerable."†

Sir A. Carlyle states: "The most obnoxious practice is assuredly that of giving children wine and strong drinks at an early period. In infancy, the texture of the growing body is more susceptible of disordered changes than after maturity. The fibres are then more susceptible of irritation; and alterations of structure, or errors in any of the functions of the body, may be then established, and become the foundation of future disorders, which may prove irremediable. I doubt much whether the future moral habits, the temper and intellectual propensities, are not greatly influenced by the early effects of fermented liquors upon the brain and sensorial organs. Of all the errors in the employment of fermented liquors, that of giving them to children seems to be fraught with the worst consequences. The next in the order of mischief is, *their employment by nurses, and which I suspect to be a common occasion of dropsy in the brain in infants,* as that is an inflammatory disease in its commencement."‡

Dr. Macnish says: "Parents should be careful not to allow their youthful offspring

* Alcott, on Vegetable Diet, Boston, 1838, p. 217.

† Essay on Drunkenness, pp. 170-4.

* Lecture on the Preservation of Health, p. 107, 1800.

† Hygeia; or Essays Moral and Medical, 1802.

‡ MS. Lectures on Fermented Liquors,

stimulating liquors of any kind, except in cases of disease, and then only under the guidance of a medical attendant. Children naturally dislike liquors—a pretty convincing proof that in early life they are totally uncalled for, and that they only become agreeable by habit.”*

Dr. Dods, in reference to the practice of administering small portions of gin-toddy to soothe infants or little children, says, that among other injurious effects which it has upon the constitution of the child, “it leads ultimately to glandular diseases, especially of the bowels, to subsequent emaciation, and almost certain death. It exceedingly prevents the growth and full development of the muscular powers of the child. It alters the muscular and energetic character of the race. The progeny of intemperate parents are less healthy in all their functions than the offspring of temperate parents.”†

Mr. Poynder, an accurate and experienced observer, though not a medical man, remarks: “I have observed, that the children of dram-drinkers are generally of diminutive size, of unhealthy appearance, and sickly constitutions.”‡

Dr. Combe observes: “In childhood the nervous and vascular activity is already so predominant as to render the common use of wine, fermented liquors, tea, coffee, and other stimulants, decidedly injurious; and it is only in cases of low vitality or disease (of which none but a professional man can judge) that any advantage is to be derived from their use. Many parents, however, are in the habit of having their children brought to table at the end of their own dinner, and of giving them wine, fruit, or confections, when nothing but mischief can follow from the indulgence. This practice ought to be scrupulously avoided. The common practice of bringing young children into the dining-room and giving them wine, even while they show a dislike for it, cannot be too much reprobated. The taste, too, for such stimulus is speedily acquired, and, when encouraged, often goes far beyond the limits contemplated by the over-indulgent parent.”§

Drs. Maunsell and Evanson, in their valuable work on this subject, remark, in reference to the diet of children, two or three years old: “After dinner some drink will be requisite, and a healthy child requires, or indeed wishes for, nothing but water. Light fresh table beer would not be injurious to the child of four or five years old, but it is unnecessary, and no advantage would in this instance result from the creation of a new want.”

Dr. Harvey Lindsly says: “We have all seen these deleterious influences, (those

which arise from the use of brandy, cordials, &c.,) when the intemperate habits of the parents have been carried to a very great extent, in the production of dropsy of the brain, imbecility of mind, and a long train of physical and intellectual evils, which, perhaps, at the time, may have been attributed to hereditary predisposition, or to other causes.”*

Dr. Ayre, in his work *On the Diseases of the Liver*, remarks: “Few persons, not familiar with the diseases of children, can have any just conception of the extent of the practice which now prevails among the lower order of monthly nurses, of giving spirits and opiates to children. A poor woman, the wife of a labourer, lately informed me, that out of ten of her children, who were born healthy, nine had died under the age of three years, and most of them under two months; and that, by the advice of her nurse, she had given spirits to them all before they were a week old. Another poor woman had twins who were healthy until they were three months old, when, being obliged to work daily for her subsistence, she endeavoured to procure herself rest during the night by giving them an opiate at bed-time. The consequence was such as might have been foreseen; the poor infants immediately became ill from it, and, in the course of a few weeks, literally perished from its effects.”

Dr. Conquest, physician to the City of London Lying-in Hospital, in his *Treatise on Midwifery*, says: “There is an evil too generally prevalent, and most pernicious in its consequences on individuals and on society, and by no means confined to mothers in the lowest classes of the community, which cannot be too severely reprobated: it is the wretched habit of taking wines and spirits to remove the languor present during pregnancy and suckling; it is a practice fraught with double mischief, being detrimental both to mother and child; the relief afforded is temporary, and is invariably followed by a greater degree of languor, which demands a more powerful stimulus, which at length weakens and eventually destroys the tone of the stomach, deteriorates the milk, and renders it altogether unfit to supply that nutriment which is essential to the welfare and existence of the child. Most nurses, who have good sense enough to try, will find the comfort of their feelings best consulted, the constitution best supported, and the improvement of their infants most rapid, when they avoid spirits, wine, or beer, and drink milk as their ordinary beverage.”

The concurrent testimony of all medical writers, whether of ancient or modern times, prohibits the use of inebriating liquors to children and young persons.

* *Anatomy of Drunkenness*, p. 244.

† *Parliamentary Evidence*, p. 219, 1834.

‡ *Ibid.*, Appendix, p. 423.

§ *Management of Infancy*, pp. 314-16.

* Prize Essay, by Harvey Lindsly, M.D., Washington, 1835.

SECTION VIII.

INEBRIATE HUMAN COMBUSTION.

"THE best," said he, "that I can yon advise,
Is to avoid the occasion of the ill;
For when the cause, whence evil doth arise,
Removed is, th' effect sure ceaseth still."
THE FAIRIE QUEENE, B. vii., Cant. 6.

"O, thou invisible spirit of wine, if thou hast no
name to be known by, let us call thee—Devil!"
SHAKESPEARE.

"There may be some difficulty in giving credit
to so marvellous a dialthesis: yet, examples of its
existence and of its leading to a migratory and fatal
combustion are so numerous, and so well authen-
ticated, and press upon us from so many different
countries and eras, that it would be absurd to with-
hold our assent."
DR. MASON GOOD.

I. Remarkable examples of the evolution of inflam-
mable gases from the human frame.—II. Cases
of Human Combustion.—III. Incombustibility of
the human frame in its natural state.—IV. Con-
ditions of the body favourable to combustion.—
V. Theories of Human Inebriate Combustion.

INEBRIATE HUMAN COMBUSTION forms a
branch of investigation fraught with deep
interest, whether we view it in regard to
the thrilling nature of its details, or the
phenomena which it presents for scientific
research. The scepticism of past years, in
particular amongst medical men, has to a
great extent disappeared, and although the
rationale of this phenomena is as yet in-
volved in obscurity, the fact of its occurrence
is undeniable. It would be absurd in the
present day, as Dr. Mason Good asserts,
to withhold our assent to these facts, sub-
stantiated by evidence as strong as it is con-
clusive. "That cases of this kind," says
Dr. Apjohn "have really taken place, seems
now established by indisputable evidence."
"It can no longer be doubted," remarks Dr.
Gordon Smith, "that persons have retired
to their chambers in the usual manner, and
in place of the individual, a few cinders,
and perhaps part of his bones, were found."

I. *Remarkable examples of the evolution
of inflammable gases from the human frame.*
—Previous to entering into the details of
these cases, and the phenomena which
they present, it may be interesting to relate
some remarkable analogous occurrences,
which however apocryphal they may ap-
pear to the reader, are related by men of
learning and research. Certain writers in
a valuable publication produce strong proofs
that very violent combustion may be pro-
duced in the human body by nature and by
artificial processes.* "That animal bodies
are liable to internal combustion," remarks
Sir David Brewster, "is a fact which was
well known to the ancients."† The same
distinguished writer is of opinion, that

many instances which have been adduced
as examples of spontaneous combustion
are merely cases of individuals who were
highly susceptible of strong electrical exci-
tation. He collates several curious cases
from authentic sources. In one instance,
Peter Bovistean states, that the sparks of
fire thus produced reduced to ashes the hair
of a young man. John De Viana says, that
the wife of Dr. Freilas, physician to the
Cardinal de Royas, Archbishop of Toledo,
emitted, by perspiration, an inflammable
matter of such a nature, that when the rib-
bon which she wore over her chemise was
taken from her person, and exposed to the
cold air, it instantly took fire, and shot forth
like grains of gunpowder. Peter Borelli
records a similar circumstance. The linen
of a peasant took fire whether it was laid
up in a box when wet, or hung up in the
open air. Ezekiel de Castro relates the re-
markable case of Alexandrims Megetnis,
a physician, from one of whose vertebrae
there issued a fire potent enough to scorch
the eyes of those who were present.—
Krantzius informs us, that during the wars
of Godfrey of Boulogne, certain individuals
who belonged to the territory of Nivers
were burning with invisible fire, and that
some of them, to arrest this calamitous con-
dition, cut off a foot or a hand where the
burning had commenced.* Ancient writers
relate, that in the time of the Roman consuls,
Gracchus and Juventinus, a flame issued
from the mouth of a bull, without the ani-
mal suffering any serious injury.

John Henry Cohausen states, that a
gentleman in Poland, in the time of Queen
Bona Sforza, who had drunk two dishes
of a liquor called brandy-wine, vomited
flames, and was in consequence consumed.
Sturmian assures us, that in northern
countries flames frequently burst from
the stomachs of persons in a state of
intoxication.† Three noblemen of Cour-
land, who had made a wager which could
drink the most spirits, two of these un-
fortunate individuals died from suffoca-
tion in consequence of the flames which
were emitted from their stomachs with
great violence.‡ Thomas Bartholin states,
on the authority of Vorstius, that a soldier
who had drunk two glasses of spirits died
after an irruption of flames from his
mouth.§ Bartholin also mentions a similar
accident after a drinking match of strong
liquor.|| Dr. Haller, who is well known as
a learned German physician of the last
century, relates the case of a notorious
drunkard who was suddenly destroyed
(from belching accidentally), in consequence
of the vapour discharged from the stomach
taking fire by coming in contact with the

* Ibid., pp. 321-22.

† German Ephemerides, Tenth Year, p. 55.

‡ Ibid.

§ First Century.

|| Third Century.

* German Ephemerides, Observ. 77.

† Letters on Natural Magic, p. 321, 1832.

flame of a candle. De Mare relates the case of a shepherd of Laliowitz, addicted to excessive drinking, who, in the course of his last illness, was constantly affected with eructations of an inflammable nature, which had evidently an alcoholic odour.* Dr. Swediaur assures us, that spontaneous combustion is very prevalent in the north of Europe, from the use of eau-de-vie, in which the inhabitants of that portion of the globe indulge to excess.†

It would be useless in the present instance to speculate on the truth or error of these singular cases of semi-combustion. The writer simply adduces them as statements placed on record by men of eminence and weight, and as introductory to cases yet more remarkable, whether as regards the phenomena which they present, or the accuracy with which they are detailed by writers of unimpeachable character.

II. *Cases of Human Combustion.*—Jacobæus, in the Transactions of Copenhagen, informs us, that in 1692, a woman among the lower ranks, who for three years had used spirituous liquors to such a great excess, that she would take none or little other support, sat down one evening on a straw chair to sleep, and her body was found on the next morning almost entirely consumed. The only parts not found destroyed were the skull and the extreme joints of her fingers.

The Annual Register for 1763 gives the following details from the Memoir of Bianchini: "The Countess Cornelia Bandi, of the town of Cesena, aged 62, enjoyed a good state of health. One evening, having experienced a sort of drowsiness, she retired to bed, and her maid remained with her till she fell asleep. Next morning, when the girl entered to awaken her mistress, she found nothing but the remains of her body in a most horrid condition; at the distance of four feet from the bed, was a heap of ashes, in which could be distinguished the legs and arms untouched. Between the legs lay the head, the brain of which, together with half the posterior part of the cranium, and the whole chin, had been consumed; three fingers were found in the state of a coal; the rest of the body was reduced to ashes, and contained no oil; the tallow of two candles was melted on a table, but the wicks still remained, and the feet of the candlesticks were covered with a certain moisture. The bed was not damaged, the bed-clothes and coverlid were raised up and thrown on one side, as is the case when a person gets up. The furniture and tapestry were covered with a moist kind of soot of the colour of ashes, which had penetrated into the drawers and dirtied the linen. This soot, having been conveyed to a neighbour's kitchen, adhered to the walls and the uten-

sils. A piece of bread in the cupboard was covered with it, and no dog would touch it. The infectious odour had been communicated to other apartments. It appears from the Annual Register, that the Countess Cesena *was accustomed to bathe all her body in camphorated spirits of wine.* No contradiction was made to the details of this extraordinary event, which were published by Bianchini at the time when it occurred. The Marquis Scipio Maffei, a contemporary of Bianchini, also attested the fact. Paul Rolli, moreover, confirmed the evidence to the Royal Society of London.

The Annual Register adduces two other similar cases which occurred in England; the one at Southampton, and the other at Coventry.

The Annual Register for 1773, p. 78, details another instance of the like kind, as narrated in the words of Mr. Wilmer, surgeon: "Mary Clues, aged 52, was much addicted to intoxication. Her propensity to this vice had increased after the death of her husband, which happened a year and a half before: *for about a year, scarcely a day had passed in the course of which she did not drink half a pint of rum or aniseed water.* Her health gradually declined, and about the beginning of February she was attacked by the jaundice, and confined to her bed. *Though she was incapable of much action, and not in a condition to work, she still continued her old habit of drinking every day, and smoking a pipe of tobacco.* The bed in which she lay stood parallel to the chimney of the apartment; the distance from it about three feet. On Saturday morning, the 1st of March, she fell on the floor, and her extreme weakness having prevented her from getting up, she remained in that state till some one entered and put her to bed. The following night she wished to be left alone; a woman quitted her at half-past eleven, and according to custom shut the door and locked it. She had put on the fire two large pieces of coal, and placed a light in a candlestick on a chair at the head of the bed. At half after five in the morning, a smoke was seen issuing through the window, and the door being speedily broken open, some flames which were in the room were soon extinguished. Between the bed and the chimney were found the remains of the unfortunate Clues; one leg and a thigh were still entire, but there remained nothing of the skin, the muscles, or the viscera. The bones of the cranium, the breast, the spine, and the upper extremities, were entirely calcined, and covered with a whitish efflorescence. The people were much surprised that the furniture had sustained so little injury. The side of the bed which was next to the chimney had suffered the most; the wood of it was slightly burnt, but the feather-bed, the clothes, and covering, were safe. I entered the apartment about two hours after it had been opened,

* Cyclopædia of Pract. Méd., vol. i., p. 452.

† Ibid., vol. i., p. 455.

and observed that the walls and every thing in it were blackened; that it was filled with a very disagreeable vapour, but that nothing except the body exhibited any strong traces of fire."

Vieq d'Azyr, in the *Encyclopedie Methodique*, under the head "Pathologic Anatomy of Man," relates a similar case. "The body of a woman, aged 50, *who indulged to excess in spirituous liquors, and went to bed every night in a state of intoxication*, was found entirely burnt and reduced to ashes, some of the osseous parts only excepted. The furniture of the apartment suffered very little damage." The same writer adds, that there had been many other cases of the like kind. In the *Acta Medica et Philosophica Hafniensia*, 1673, Thomas Bartholin relates the following circumstance: "A poor woman at Paris used to drink spirit of wine plentifully for the space of three years, so as to take nothing else. Her body contracted such a combustible disposition, that, one night, when she lay down on a straw couch, she was all burned to ashes, except her skull and the extremities of her fingers."

The Transactions of the Royal Society of London detail an extraordinary and well-authenticated case of human combustion. It was attested at the time by a great number of eye-witnesses, was recorded in all the public journals, and became the subject of learned discussion. Three accounts, written by different authors, agree in all essential particulars. The following are the particulars: "Grace Pitt, the wife of a fishmonger, of the parish of St. Clement, Ipswich, aged about 60, had contracted a habit, which she continued for several years, of coming down every night from her bed-room, half-dressed, to smoke a pipe. On the night of the 9th of April, 1774, she got up from her bed as usual. Her daughter, who slept with her, did not perceive she was absent till next morning when she awoke, soon after which she put on her clothes, and, going down into the kitchen, found her mother stretched out on the right side, with her head near the grate; the body extended on the hearth, with the legs on the floor, which was of deal, having the appearance of a log of wood consumed by a fire without apparent flames. On beholding this spectacle, the girl ran in great haste and poured over her mother's body some water, contained in two large vessels, in order to extinguish the fire; while the fetid odour and smoke which exhaled from the body almost suffocated some of the neighbours who had hastened to the girl's assistance. The trunk was in some measure incinerated, and resembled a heap of coals covered with white ashes. The head, the arms, the legs, and the thighs, had also participated in the burning. *This woman, it is said, had drunk a large quantity of spirituous liquor*, in consequence of being overjoyed to hear that

one of her daughters had returned from Gibraltar. There was no fire in the grate, and the candle had burnt entirely out in the socket of the candlestick, which was close to her. Besides, there were found, near the consumed body, the clothes of a child and a paper-screen, which had sustained no injury by the fire. The dress of this woman consisted of a cotton gown.

Le Cat, in a Memoir on Spontaneous Combustion, relates several interesting cases. Having, as he remarks, spent several months at Rheims, in the years 1724 and 1725, he lodged at the house of Sieur Millet, *whose wife got intoxicated every day*. The domestic economy of the family was managed by a pretty young girl, a circumstance to which he makes especial reference, in order that all the circumstances which accompanied the fact he relates may be better understood. This woman was found consumed on the 20th of February, 1725, at the distance of a foot and a half from the hearth in the kitchen. A part of the head only, and a portion of the lower extremities and a few of the vertebrae, had escaped combustion. A foot and a half of the flooring under the body had been consumed, but a kneading-trough and a powdering-tub, which were very near the body, sustained no injury. M. Chriteen, a surgeon, examined the remains of the body, with every judicial formality. Jean Millett, the husband, had, as usual, retired to rest with his wife, who, unable to sleep, had gone into the kitchen, where he thought she was warming herself. Having fallen asleep, he was awakened about two o'clock with an infectious odour; and having run into the kitchen, he found the remains of his wife in the state described in the report of the physicians and surgeons. A legal inquiry was instituted; the unfortunate husband was brought to trial, and condemned on the supposition that he had murdered his wife, the better to intrigue with the handsome servant maid. An appeal to a superior and enlightened court, however, set the cause of the combustion in its proper light. The poor man was acquitted, but, from uneasiness of mind, passed the remainder of his days in an hospital.

Le Cat relates another case of equal interest, communicated to him by M. Boinneau, curé of Plerquer, near Dol, February 22, 1749. "Madame de Boiseon, eighty years of age, exceedingly meagre, *who had drunk nothing but spirits for several years*, was sitting in her elbow-chair before the fire, while her waiting-maid went for a few moments out of the room. On her return, she found her mistress on fire, and immediately gave an alarm. Some people having come to her assistance, one of them endeavoured to extinguish the flames with his hand, but they adhered to it as if it had been dipped in brandy or oil on fire. Water was brought and thrown on the lady in

abundance, yet the fire appeared more violent, and was not extinguished till the whole flesh had been consumed. Her skeleton, exceedingly black, remained entire in the chair, which was only a little scorched; one leg only, and the two hands, detached themselves from the rest of the bones. It was not known whether her clothes had caught fire by approaching the grate. The lady was in the same place in which she sat every day. There was no extraordinary fire, and she had not fallen." M. Boinneau remarks, that, what made him suppose that the use of spirits might have produced this effect was, that he was assured that at the gate of Dinan an accident of the like kind happened to another woman under similar circumstances.

The Journal de Medecine, vol. lix., p. 440, publishes two corroborative cases. Muraire, a surgeon, relates the first case which took place at Aix, in Provence. "In February, 1779, Mary Jauffrey, widow of Nicholas Gravier, shoemaker, of a small size, exceedingly corpulent, and *addicted to drinking*, having been burnt in her apartment, M. Rocas, the colleague of Muraire, who was commissioned to make a report respecting her body, found only a mass of ashes, and a few bones, calcined in such a manner that on the least pressure they were reduced to dust. The bones of the cranium, one hand, and a foot, had in part escaped the action of the fire. Near these remains stood a table, untouched, and under the table a small wooden stove, the grating of which having been burnt afforded an aperture through which, M. Rocas supposes, the fire which occasioned the melancholy accident had been communicated. In other respects, there was no appearance of fire, either in the chimney or in the apartment, so that, except the fore part of the chair, it appeared that no other combustible matter contributed to this speedy incineration, which was effected in the space of seven or eight hours."

The second case detailed in the *Journal de Medecine*, vol. lix., p. 140, occurred in Caën. It is narrated by Merille, a surgeon of the same city. M. Merille was requested on the 3rd of June, 1782, by the king's officers, to draw up a report of the state in which he found Mademoiselle Thuars. The result of his observations was as follows:—"The body lay with the crown of the head against one of the andirons, at the distance of eighteen inches from the fire; the remainder of the body was placed obliquely before the chimney, the whole being nothing but a mass of ashes. Even the most solid bones had lost their form and consistence; none of them could be distinguished except the coronal, the two parietal bones, the two lumbar vertebræ, a portion of the tibia, and a part of the omoplate; and these, even, were so calcined that they became dust by the least pressure. The right foot was found entire, and scorched at its upper

junction; the left was more burnt. The day was cold, but there was nothing in the grate except two or three bits of wood about an inch diameter, burnt in the middle.—None of the furniture in the apartment was damaged. The chair on which Mademoiselle Thuars had been sitting was found at the distance of a foot from her, and absolutely untouched. The lady was exceedingly corpulent, above sixty years of age, and *much addicted to spirituous liquors*. *On the day of her death, she drank three bottles of wine, and about a bottle of brandy*. The consumption of the body took place in less than seven hours, though, according to appearances, nothing around the body was burnt but the clothes."

Pierre Aime Lair, from whose elaborate Essay on Human Combustion, several of the above cases have been extracted, informs us, that the town of Caën affords several instances of the same kind. Bouffet, a physician of Argentan, author of an Essay on Intermittent Fevers, told him the case of a woman of the lower class who lived at *Place Villars, who was known to be much addicted to strong liquors*, and who was found in her house burnt. The extremities of her body only were spared, but the furniture was very little damaged.

The same unfortunate accident happened also at Caën, to an old woman *who was addicted to drinking*. Aime Lair was assured by those who told him the fact, that the flames which proceeded from the body could not be extinguished by water. He does not, however, think proper to relate this and the particulars of another event which took place in the same town, because they were not attested by a *proces verbal*, or communicated by professional men, and not calculated, therefore, to inspire the same degree of confidence.

The following well-authenticated case is extracted from the work of Foderé, and abridged by Paris and Fonblanque in their Treatise on Medical Jurisprudence. "Don Gio Maria Bertholi, after having spent the day in travelling about the country, arrived in the evening at the house of his brother-in-law. He immediately requested to be shown to his destined apartment, where he had a handkerchief placed between his shirt and shoulders; and being left alone, betook himself to his devotions. A few minutes had scarcely elapsed, when an extraordinary noise was heard in the chamber, and the cries of the unfortunate man were particularly distinguished. The people of the house, hastily entering the room, found him extended on the floor, and surrounded by a light flame, which receded (*à mesure*) as they approached, and finally vanished. On the following morning, the patient was examined by M. Battaglia, who found the integuments of the right arm almost entirely detached, and pendent from the flesh; from the shoulders to the thighs the integu-

ments were equally injured ; and on the right hand, the part most injured, mortification had already commenced, which, notwithstanding immediate scarification, rapidly extended itself. The patient complained of burning thirst, was horribly convulsed, and was exhausted by continual vomiting, accompanied by fever and delirium. On the fourth day, after two hours of comatose insensibility, he expired. During the whole period of his sufferings, it was impossible to trace any symptomatic affection. A short time previous to his death, M. Battaglia observed, with astonishment, that putrefaction had made so much progress ; the body already exhaled an insufferable odour ; worms crawled from it on the bed, and the nails had become detached from the left hand. The account which this unfortunate patient gave, was, that he felt a stroke like the blow of a cudgel on the right hand, and at the same time he saw a lambent flame attach itself to his shirt, which was immediately reduced to ashes, his wristband, at the same time, being utterly untouched. The handkerchief, which, as before mentioned, was placed between his shoulders and his shirt, was entire, and free from any trace of burning ; his breeches were equally uninjured, but though not a hair of his head was burned, his coil was totally consumed. The weather, on the night of the accident, was calm, and the air very pure ; no empyreumatic or bituminous odour was perceived in the room, which was also free from smoke ; there was no vestige of fire, except that the lamp, which had been full of oil, was found dry, and the wick reduced to a cinder." No reference in this case is made to the diet of the unfortunate individual. A detail of the occurrence also appeared in the *Allgemeine Literatur Zeitung*, for 1786.

A more recent case is related by Dr. Apjohn, in a very excellent article on Spontaneous Combustion, in the *Cyclopædia of Practical Medicine*. It is transcribed in his own words. "Anne Nelis, wife to a wine and porter merchant, living in South Frederick-street, Dublin, let in her husband, who had been out at a party, between twelve and one o'clock on a Saturday night. After some altercation had taken place between them, *both being in a state of intoxication*, Mr. Nelis went up-stairs to bed, but in a few minutes came down to request his wife to accompany him, an invitation which she positively declined ; upon which, he took with him her candle, observing that, if she was determined to sit up, she should do so in the dark. Next morning, the maid-servant having opened the windows of the back parlour, observed something in the arm-chair in which Mrs. Nelis usually sat, which she at first sight imagined to have been put there by young Nelis, who at the instant entered the room, for the purpose of frightening her. Upon examination, how-

ever, it turned out to be the remains of her mistress, who was found in the following state: She was seated in the chair, at a distance from the fire, which appeared to have burned out, with her head leaning upon her right hand, and bearing behind against the wall. The trunk of the body was burnt to a cinder, as also the clothes which invested it ; but the pelvic region, the lower and upper extremities, and such portions of her dress as covered these parts, sustained no injury. Her face had a scorched appearance ; but her hair, and the papers she had put in it, had entirely escaped. The back and seat of the chair had not suffered, but its arms were charred on the inner side, where in contact with the body. With the exception of the arms of the chair, the combustion had not extended to surrounding bodies. The room was filled with a penetrating and offensive odour, which was still perceptible after the lapse of several days. This woman was about forty-five years of age, of low stature, had rather a tendency to corpulence, and *was a confirmed drunkard*."

Mr. Wood, a Wesleyan minister, then residing in Limerick, relates the following details in the *Methodist Magazine*, for 1809. The facts were also related to Dr. Apjohn, in a letter received from the same minister, and confirmed by an intelligent lady residing in Limerick, who personally inspected the floor through which the hole was burnt ; the repairs which the place had to undergo still direct attention to the precise spot which was perforated at the period:—

"Mr. O'Neill, keeper of the Five Pounds Alms House in the city of Limerick, was awakened about two o'clock in the morning by a person knocking at his room door, upon which he arose, and having inquired who knocked, he opened the door, and going with the person who had called him into his apartment, which lay under Mrs. Peacocke's room, he found a dead body lying on the ground burning with fire, and red as copper, having dropped down from the loft, which was on fire. Examining the loft, he saw a large hole, the size of the dead body, burned through the boards and ceiling. He instantly ran up stairs, and having burst open Mrs. Peacocke's room door, saw in the middle of the room the burnt hole through which the body had fallen. Having, with assistance, quenched the fire about the hole, he examined by what means the body had taken fire, but could discover no cause. There was no candle or candlestick near the place, no fire in the grate, but what was raked in the ashes, as is the manner of preserving fire by night ; the room was examined, and nothing had taken fire but that part of the floor through which she had fallen. Even a small basket made of twigs, and a small trunk of dry wood, which lay near the hole, escaped, and were not so

much as touched by the fire. This phenomenon was the next day examined by the mayor, clergymen, and several gentlemen of the city. The impossibility of ascertaining the cause of the fire, the extraordinary circumstance of no part of the room being burnt but the centre of it, through which she had fallen, added to the well-authenticated circumstance of her recent diabolical imprecations and lies, obliged every observer to resolve so awful an event into 'the visitation of God's judgment in the punishment of a daring and persevering sinner.' Mrs. Peacocke was about sixty years of age, and *indulged in the use of intoxicating liquors to an immoderate extent.*"

Dr. Apjohn relates the two following additional cases; they are extracted from the Cyclopædia of Practical Medicine: "Mrs. Stout, widow of a watchmaker, and married a second time to a man of the name of Hanna, went to bed one evening in apparent health, and was found next morning burnt to a cinder on the floor of her bedroom. When discovered, a vapour was still issuing from her mouth; and those parts of the body, the form of which had not been altered, immediately crumbled down upon being handled. Her chemise and night-cap escaped uninjured." This case occurred in 1808, at a place called Coote Hill, in the county of Cavan. The subject of it was about sixty years of age, and an *inveterate dram-drinker.*

Dr. Apjohn was indebted to the Rev. Mr. Ferguson, of Dublin, for the facts of the next case. Mr. Ferguson had professional opportunities of acquaintance with the family. He states also, that soon after the occurrence he examined the room in which the old woman had been burnt, and was satisfied that the fire had not extended to the bed, bed-clothes, or furniture: "A. B., a woman about sixty years of age, who lived with her brother, in the county of Down, retired one evening to bed with her daughter, *both being, as was their constant habit, in a state of intoxication.* A little before day some members of the family were awakened by an extremely offensive smoke which pervaded their apartment, and on going into the chamber where the old woman and her daughter slept, they found the smoke to proceed from the body of the former, which appeared to be burning with an internal fire. It was as black as coal, and the smoke issued from every part of it. The combustion having been arrested (which was effected with difficulty, although there was no flame), life was found completely extinct. While the body was being removed into the coffin, which was done as soon as possible, it was dropping in pieces. Her daughter, who slept in the same bed, sustained no injury; nor did the combustion extend to the bed or bed-clothes, which exhibited no other traces of fire than the

stains produced by the smoke. According to the testimony of one of the relations, who is represented as a woman of the strictest veracity, there was no fire whatever in the room. *The subject of the case had been grossly intemperate for several days before her decease, having drunk at this period much more ardent spirit than usual.*"

In the Athenæum for 1836, p. 540, the details of a case are given which had then recently occurred at Annay, in the department of Avalon, France. "The body of a very fat woman, aged seventy-four years, and *addicted to drinking brandy at twenty-seven degrees*, was discovered one morning by the mayor in a horrid state, and accompanied with an extraordinary smell. Near the chimney was laid a heap of something burnt to cinders, at one end of which was a head, a neck, the upper part of a body, and one arm. At the other end were some of the lower parts, and one leg, still retaining a very clean shoe and stocking. No other traces of fire were to be seen, except a blue flame which played along the surface of a long train of grease or serous liquor, which had been produced by the combustion of the body. The mayor found it impossible to extinguish the flame, and summoned all the authorities; and from the state of the apartment, and comparison of circumstances, it was concluded amongst them, that previous to going to bed, for which she had evidently been making preparations, the woman had been attempting to ignite some embers with her breath."

Dr. Peter Scholefield, of Upper Canada, relates the following example of recent occurrence. It was that of a young man about twenty-five years of age: "He had been," says Dr. Scholefield, "an habitual drinker for many years. I saw him about nine o'clock in the evening on which it happened. He was then, as usual, not drunk, but full of liquor. About eleven the same evening, I was called to see him. I found him literally roasted from the crown of his head to the soles of his feet. He was found in a blacksmith's shop just across the way from where he had been. The owner all of a sudden discovered an extensive light in his shop, as though the whole building was in one general flame. He ran with the greatest precipitancy, and on flinging open the door discovered a man standing erect in the midst of a widely-extended silver-coloured blaze, bearing, as he described it, exactly the appearance of the wick of a burning candle in the midst of its own flame. He seized him by the shoulder and jerked him to the door, upon which the flame was instantly extinguished. There was no fire in the shop, neither was there any possibility of fire having been communicated to him from any external source. It was purely a case of spontaneous ignition. A general sloughing soon came on, and his flesh was consumed or removed in the dress-

ing, leaving the bones and a few of the larger blood-vessels standing. The blood, nevertheless, rallied around the heart, and maintained the vital spark until the thirteenth day, when he died, not only the most loathsome, ill-featured, and dreadful picture that was ever presented to human view, but his shrieks, his cries, and lamentations, were enough to rend a heart of adamant. He complained of no pain of body,—his flesh was gone. He said he was suffering the torments of hell; that he was just upon its threshold, and should soon enter its dismal caverns; and in this frame of mind gave up the ghost. Oh, the death of a drunkard! Well may it be said to beggar all description. I have seen," concludes Dr. Scholefield, "other drunkards die, but never in a manner so awful and affecting."

The above cases are for the most part, extracted from the various writers whose names are cited as authorities, and are given, in almost every instance, *in the precise words of the narrator*. Several other cases are related in the *Dictionnaire de Medecine*, as well as in other creditable publications. The above cases, however, amply suffice to illustrate the subject.

In a memoir recently read before the Academie des Sciences, the chief circumstances connected with spontaneous combustion are described as follows: 1. The greater part of the persons who have fallen victims to it *have made an immoderate use of intoxicating liquors*. 2. Combustion is almost always general, but sometimes is only partial. 3. It is much rarer among men than among women, and they are principally old women. There is but one case of the combustion of a girl of seventeen years of age, and that was only partial. 4. The body and the viscera are invariably burnt, while the feet, the hands, and the top of the skull almost always escape combustion. 5. Although it requires several fagots to burn a common corpse, incineration takes place in these spontaneous combustions without any effect on the combustible matter in the neighbourhood. In an extraordinary case of a double combustion operating upon two persons in one room, neither the apartment nor the furniture was burnt. 6. It has not been at all proved that the presence of an inflamed body is necessary to develop spontaneous human combustions. 7. Water, so far from extinguishing the flame, seems to give it more activity; and when the flame has disappeared, secret combustion goes on. 8. Spontaneous combustions are more frequent in winter than in summer. 9. General combustions are not susceptible of cure, only partial. 10. Those who undergo spontaneous combustion are the prey of very strong internal heat. 11. The combustion bursts out all at once, and consumes the body in a few hours. 12. The parts of the body not attacked are struck with mortification.

13. In persons who have been attacked with spontaneous combustion, a putrid degeneracy takes place, which soon leads to gangrene.

III. *Indestructibility of the human frame by combustion, in its natural state.* This singular circumstance, that the combustion which consumes the human frame, under the circumstances detailed above, is not sufficiently potent to ignite woollen or cotton articles, substances ordinarily of a peculiarly inflammable character. The human body, however, under other circumstances, is difficult of combustion. "At a period when criminals were condemned to expiate their crimes in the flames," says an authority, "it is well-known what a large quantity of combustible materials was required for burning their bodies.*" Pierre Aime Lair relates the case of Renand, a baker's boy, who some years ago was condemned to be burnt at Caën. Two large cart-loads of fagots were required to consume the body, and at the end of more than ten hours some remains of the bones were still to be seen.† The case of Mrs. King, in this country, illustrates the same fact. She was murdered by a foreigner, who afterwards attempted to consume her remains by burning. He was engaged in the execution of this scheme for several weeks, and even at the expiration of that period he had not entirely accomplished his object. The case of Daniel Good and his unfortunate victim is of too recent occurrence to need more than brief reference.

IV. *Conditions favourable to combustion.* These may briefly be enumerated as follows:

1. *Depraved secretions.* The pathological condition, which forms the proximate cause of human combustion, is the result of depraved secretions. The cases known, indeed, almost exclusively relate to persons addicted to habits of gross intemperance, whose bodies were enfeebled by habitual excess.

2. *Age.* Most of the cases of human combustion occurred in persons of advanced life. The Countess Cesena was sixty-two years of age; Grace Pitt, sixty; Madame de Boiseon, eighty; Mary Clues, fifty-two; Mademoiselle Thuars, more than sixty; Mrs. Stout, sixty; Anne Nelis, forty-five; and A. B., sixty years. Julia Fontenelle relates two cases‡ of aged individuals, addicted to intemperate habits, who fell victims to this fearful combustion in 1820. The one, whose whole body was consumed except the skull and a portion of skin, had attained to the advanced age of ninety. The right leg alone remained unconsumed of the other, who was sixty-six years old. General William Repland relates the case of a very old person, in which the greater portion of the body was consumed. Alphonse Deven-

* Paris and Fonblanque's Medical Jurisprudence.

† Journal de Physique, Pluvie, year 8.

‡ Vide Revue Medicale.

gee details another case of an individual aged fifty-one, which occurred in 1829. The muscles of the trunk, thighs, and superior extremities, were burnt. The only exceptions to this general rule, as yet known, are two. The first was that of a girl aged seventeen, whose case is detailed in the Journal of the Hospital of Hamburgh. One finger of the right hand alone was burnt. In the other case, related by Dr. Peter Scholefield, the consequences were terribly fatal. In the latter instance, the excesses of the young man had induced a condition of body common only to gross intemperance and advanced life.

It appears, therefore, from the cases on record, that the structure of old and feeble persons is most favourable to human combustion.

3. *Sex.* In a table of twenty-five authentic cases which the author has collected from various sources, not less than twenty were females. The fragile structure of women renders them peculiarly prone to this condition. Females are not only more delicate in their structure, but inactive and sedentary in their mode of life. Hence, inebriating liquors exercise a powerful influence on their constitutions. In no case, so far as our knowledge extends, does combustion operate on persons of robust and hardy frames. "Every thing which we know upon the subject," says Dr. Apjohn, "justifies us in inferring that the causes which produce it are such as have most influence in reducing the powers of life and enervating the system."*

V. *Theories of human combustion.* The fact of human combustion being established on such clear and undeniable evidence, the following questions naturally arise: How is this anomalous condition of the human frame produced? Is it the immediate result primarily of some chemical action, or the consequence of peculiar pathological changes effected in the system? Again, In what manner does the combustion commence? Is it spontaneous, or does the ignition in the first instance originate in contact with some inflammable substance?

Numerous theories illustrative of these points have been advanced by different writers: most of them, however, are unsatisfactory, and founded on false data.

In what manner is the body rendered so inflammable as to support combustion? The theory of alcoholic impregnation most popularly obtains. The facts presented to the reader in previous sections demonstrate that the tissues of the human frame may literally be soaked with alcohol. Breschet found that the different tissues of criminals, whose bodies he opened soon after execution, evolved a powerful odour of eau-de-vie. Dumeril and Cuvier made a similar observation upon the body of a workman at

the Garden of Plants, who died from the effects of inordinate indulgence in wine. Similar cases occurred at the Manchester Royal Infirmary, in 1842.

The theory of alcoholic impregnation is, however, *of itself* insufficient to account for human combustion. If the mere impregnation of the tissues with alcohol was sufficient to account for this phenomena, we should anticipate its more frequent occurrence. One powerful reason why we should attribute its remote cause to pathological changes is the fact, that when an individual in comparative health dies of intoxication, his frame does not appear to be more inflammable than it would have been under other circumstances. The surface, also, of an anatomical preparation, recently removed from the spirit in which it has been soaked for an unlimited period, on being placed in contact with the flame of a candle, will only burn until the alcohol is consumed. The substance of the preparation remains uninjured.

Dr. Marc supposes that human combustion may be induced by the development of inflammable gases in various parts of the system. Well-authenticated cases are on record of the presence of inflammable gas *during life*, not only in the stomach and intestines, but in the different tissues. M. Bally relates a remarkable case which came under his notice, at the Hôtel-Dieu, Paris;* and excited at the time considerable attention among the members of the Académie Nationale de Médecine. The development of inflammable gases, however, during life, as Dr. Apjohn correctly remarks, whether the result of putrefaction or of depraved secretion, will not explain the completeness of the incineration which takes place in human combustion, nor the rapidity with which the combustion spreads over the whole body.†

How does the combustion commence? The most eminent writers on this subject are as yet undetermined whether human combustion is *spontaneous* in its origin, or whether the ignition commences by contact with some inflammable substance. An ignited body has, in most cases, been found in the immediate vicinity of the corpse. In some instances a lighted pipe has been supposed to have commenced the combustion; in others, a lamp, candle, stove, or fire in the hearth. Vicq D'Azyr, Lair, Breschet, Dupuytren, and other eminent writers, countenance this view, and *attribute its origin, in every instance, to an external cause.*

Maffei, Lecat, Kopp, and Marc, who conceive this theory inadequate to account for all the phenomena witnessed in cases of human combustion, suggest that the source of ignition may depend on the *calorific powers of the electric fluid.* Apparently insur-

* Dict. of Pract. Med., Art. Spontan. Combust.

* Cyclopæd. of Pract. Med., vol. i., p. 452.

† Ibid., p. 453.

mountable difficulties, however, present themselves to this view.

Morelli Fanzago, and, of late, Maraschin, writers who suppose that the human frame takes fire from some internal action, independent of all outward agencies, such as the electric fluid or the application of an ignited substance, argue that the presence of phosphuretted hydrogen gas, which inflames upon contact with the atmosphere, presents a satisfactory explanation of *spontaneous combustion*. Phosphoric acid, united to some base, is found in considerable quantity as a constituent of the bones. "It is also," as Dr. Apjohn remarks, "found in a peculiar state of combination in the cerebral mass, and in the fat which is deposited throughout the cellular tissue. Phosphorus is evolved among the gaseous products in union with hydrogen, when putrefaction takes place after death;" and the same writer seems to think that there is little reason to doubt that this is one of the gases which are occasionally generated throughout the different textures of the living system.*

"If this be admitted," adds this physician, "as phosphuretted hydrogen inflames upon contact with the atmosphere, we shall have a perfect and simple solution of the difficulty of spontaneous combustion."†

Several serious, if not fatal, objections, however, present themselves to the reception of this theory. In the first place, there is not a sufficient portion of *free oxygen within the system*; in other words, among its tissues, to carry on combustion. Combustion, moreover, may take place *exteriorly*, and decarbonize or char the superficial membrane from the copious liberation of phosphuretted hydrogen; but this result must necessarily be partial in its extent. Physical obstacles interpose, and prevent the requisite supply *from without* of atmospheric air.

It may, however, be urged, that oxygen may be disengaged from the *living structure* in sufficient quantity to support the combustion of the phosphuretted hydrogen primarily liberated. But where is the chemical evidence to show how this decomposition of organic structure can be effected? In reviewing the interchanges of the constituent elements of organized matter, we must not forget their natural chemical affinities.

May not the causes of spontaneous combustion be intimately associated with the evolution of animal heat? Animal heat is produced by the slow combustion of the carbon of the body. This combustion is effected by the carbon uniting with the oxygen separated from the air in the act of respiration. The resulting degree of tem-

perature of course corresponds with the amount of carbon consumed.

It will be seen, that if the respiratory movements be unduly excited, such an elevated temperature would arise as would be productive of injury to the animal economy. To obviate this, a remarkable evidence of divine wisdom is furnished in the provision made for equalizing the animal temperature. This is mainly effected through the medium of perspiration, by which act the superfluous heat is dissipated in the form of aqueous vapour. A common illustration is witnessed in the case of persons who, when undergoing active exercise, are relieved by copious perspiration, which carries off that undue heat which arises from accelerated breathing.

Respiration tends to consume the body by burning its carbon. The daily amount of carbon thus burnt in an adult is computed to be $13\frac{1}{2}$ ounces. Despretz has shown that one ounce of carbon evolves as much heat during its combustion as would elevate the temperature of 105 ounces of water, 32° F. to 167° , that is, by 135 degrees; in all, therefore, 105 times 135°, equal to 14,207 degrees of heat. Now, $13\frac{1}{2}$ ounces of carbon are converted daily by an adult into carbonic acid, in respiration, and this carbon will liberate, by union with oxygen, 19,477 degrees of heat. This volume of heat daily liberated is sufficient to cause 136 lbs. of water at 32° to boil, or to heat 370 lbs. of water to the temperature of the blood. The amount of heat liberated in the system varies with the quantity of oxygen received by respiration in equal times. Thus, man takes 18 respirations per minute, and the temperature of his blood is 97.7° F. A lark breathes 22 times per minute, and has its blood of a temperature of 117.2° F.

What would be the effects of this volume of heat on the organism but for the admirable provision alluded to above? and may we not look for some of the causes of spontaneous combustion in the serious organic derangements of the tissues which would arise in the suspension or modification of this provision, in addition to the increased volume of oxygen introduced into the system, and the consequent excess of heat arising from accelerated respiration?* The use of alcohol powerfully quickens respiration; and Liebig and other recent writers contend that it is also an element of respiration, furnishing for combustion an increased quantity of carbon and hydrogen. Here, then, we have a source of undue heat, which, in its influence on a frame debilitated by intemperance, ultimately may

* Cyclopæd. of Pract. Med., vol. i., p. 454.

† Ibid., p. 454.

* The views of Liebig, as expressed in his recent work, respecting the decomposition of alcohol in the system, differ materially from those advocated in various sections of this volume. The peculiar nature of these views will be given in some notes in the Appendix.

destroy the living fibre, by suspending some and quickening others of the vital actions of the human economy. Future investigations, doubtless, will tend more clearly to elucidate this interesting subject.

The experience of Mr. Spalding, recorded in p. 215, col. 1, confirms this view.

SECTION IX.

INTEMPERANCE CONSIDERED IN A LEGAL POINT OF VIEW, AND IN THE RELATION IT BEARS TO THE CIVIL RIGHTS OF SOCIETY.

“A drunkard who is ‘*voluntarius demon*,’ hath no privilege thereby; but what hurt or ill soever he doth, his drunkenness doth aggravate it.”—SIR EDWARD COKE.

INTEMPERANCE has, in various ages, been differently estimated in a legal point of view; with one exception, however, it has ever been considered as operating injuriously to a greater or less extent upon the interests of society. This exception occurred among the Romans, at a period subsequent to their primitive temperance; and when luxurious practices had, in a considerable degree, altered their notions and feelings on a subject which had previously induced the most rigorous penal exactions. According to Menochius, the latter practice among the Romans was not to punish a man who commits a crime, when drunk, with such great severity, as if he had done the same while in a sober state, *pœnâ arbitrariâ non ordinariâ*: unless it appear in evidence that he made himself drunk *on purpose* for the crime, or boasted of it afterwards.* But although the Roman law did exonerate a man from the responsibility of a crime committed under the influence of intoxication, yet, as it also regarded drunkenness as both a crime in itself, and as productive of injury to society, it visited with punishment any attempt to incite any dependent person, as for example, a son or servant, to the practice of intemperance.†

The laws of Ancient Greece, as decreed by Pittacus of Mitylene, regarded drunkenness in a more severe light than that of the Romans. In order to mark his disapprobation of the vice, and to deter his subjects from its commission, Pittacus enacted

a law that “he who committed a crime when intoxicated should receive a double punishment;” that is, punishment not only for the crime itself, but also for the crime of drunkenness, which had occasioned it.—The Athenian laws against intemperance, were very severe, and in particular those which had reference to magistrates and other public officers. The ancient Welch law denied redress to any member, either of the clerical, legal, or medical profession, who had received an injury whilst in a state of intoxication.

The Salic law among the Franks made an excellent provision to suppress the evil consequences of drunkenness. If a man were killed at a convivial meeting in company with five or seven, the survivors should convict one as the offender, or jointly pay composition for his death.*

The English legal code does not admit of the plea of intoxication as a palliation of any crime committed in that state. “Those who presume to commit crimes when drunk, must submit to punishment when sober.”—Sir Edward Coke, the highest legal authority of his day, informs us, that “a drunkard who is *voluntarius demon*, hath no privilege thereby; but what hurt or ill soever he doth, his drunkenness doth aggravate it.” Nor has the state of intoxication ever been admitted in British courts of judicature as a sufficient reason for mitigation of punishment. The plea of drunkenness, in the case of *King v. Maclauchlin*, March, 1737, advanced in mitigation of punishment, was not allowed by the court. Sir G. Mackenzie states, that he never found this plea sustained; and that it was repelled in a case of murder, *Spott v. Douglas*, 1667. The validity of this defence is also denied by Sir Matthew Hale, (cap. iv.). All agree that “*levis et modica ebrietas non excusat nec minuit delictum*.”† Drunkenness otherwise might frequently be urged as an excuse for the commission of every kind of crime.

Individuals, in the *perfect possession of their faculties*, indulge in a practice which they are conscious will make them drunk, and which, also, they are aware may lead to serious and unpremeditated acts of violence.—The plea of drunkenness has been repelled as insufficient in extenuation of blasphemy. An individual was brought to trial for blasphemy, Nov. 22nd, 1697, “He pleaded chiefly that he was drunk or mad when he uttered the expressions, (named in the report of the trial,) if he did utter them. The court found the libel relevant to infer the pains libelled, *i. e.* death; and found the defence, that the pannel was furious or distracted in his wits, relevant; but repelled the alledgeance of fury or distraction arising from drunkenness.”‡

* Menoch. de Arb. Judicium Quæst. l. ii., cas. 326.

† Si quis servum meum, vel filium ludibrio habeat, licet consentientem, ego injurium videor accipere; veluti si in Popinam duxerit illum, si Aleam luserit. Sed hoc utcumque tunc locum habere potest, quotiens ille qui suadet animum injuriæ faciendæ habet. At quin potest malum consilium dare et qui dominum ignoret: et ideo incipit servi corrupti actio necessaria esse.—PAULUS DE INJURIIS, l. xxvi.

* Tit. de Homocidiis in conviviis factio.

† Macnish's Anatomy of Drunkenness, p. 119.

‡ Maclaurin's Arguments and Decisions, p. 731.

The Scotch law is decisive on the point under consideration, and is thus explained by Mr. Alison. "Drunkenness is no excuse for crimes; but, on the other hand, if either the insanity has supervened from drinking, without the pannel's having been aware that such indulgence in his case leads to such a consequence; or if it has arisen from the combination of drinking with a half crazy or infirm state of mind, or a previous wound, or illness, which rendered spirits fatal to his intellect, to a degree unusual in other men, or which could not have been anticipated; it seems inhuman to visit him with the extreme punishment, which was suitable in the other case. In such a case, the proper course is to convict; but in consideration of the degree of infirmity proved, recommend to the royal mercy."*

The distinction or line of partition between drunkenness and insanity has frequently been the subject of forensic investigation. An important penal distinction also exists between crimes committed in a state of actual intoxication and under the consequent state of excitement, and such as are perpetrated while labouring under *mania a potu*, or delirium tremens, at an indefinite period subsequent to the alleged intemperance.

A case in point is related by Professor Beck, in his Medical Jurisprudence. A commander of a vessel, of a fair character, respected in the place where he resided, and a man of a humane and benevolent disposition, for a length of time, during a voyage he made, drank to excess of ardent spirits. In August, 1827, he obtained a keg, or fresh supply, from a vessel which he spoke, and drank until he became stupified; but when he recovered, he ordered the keg and its contents to be thrown overboard. There was then no more intoxicating liquor on board the ship.

In two or three days from that period, symptoms of derangement were discovered in the commander, which finally ended in confirmed *delirium tremens*; and in that condition he murdered one of the men belonging to the vessel. The culprit was placed at the bar of his country on the charge of murder. The case was arrested, however, by Judge Story, on the facts of his insanity being proved, such a state being in the eye of the law a sufficient reason why he should not be held responsible for the deed. "In general," remarks Judge Story, "insanity is an excuse for the commission of every crime, because the party has not the possession of that reason which includes responsibility. An exception is, when the crime is committed by a party while in a state of intoxication, the law not permitting a man to avail himself of the excuse of his own gross vice and misconduct

to shelter himself from the legal consequences of such crime. But (for the conviction of the culprit) the crime must take place, and be the *immediate* result of the fit of intoxication, and *while it lasts*; and not, as in this case, a remote consequence, superinduced by the antecedent exhaustion of the party, arising from gross and habitual drunkenness. However criminal, in a moral point of view, such an indulgence is, and however justly a party may be responsible for his acts arising from it to Almighty God, human tribunals are generally restricted from punishing them, since they are not the acts of a reasonable being."*

A case of still greater importance is related by Professor Beck, as having occurred in a high court of legislature in America.—"William M'Donough, was indicted and tried for the murder of his wife, before the Supreme Court of the state of Massachusetts, in November, 1817. It appeared in testimony, that for several years previous he had received a severe injury of the head, and that, although, relieved of this, yet its effects were such as occasionally to render him insane. At these periods, he complained greatly of his head. The use of spirituous liquors immediately induced a return of the paroxysm; and in one of them, thus induced, he murdered his wife. He was, with great propriety, found guilty. The *voluntary* use of a stimulus, which he was well aware would disorder his mind, fully placed him under the purview of the law." Professor Beck, in subsequent editions of his work, admits that he is aware that he has probably expressed himself too strongly in this case, in a *medical* point of view. Dr. Drake asks, whether, if M'Donough had killed his wife in one of his ordinary paroxysms, he would have been condemned? "The case, however," remarks Dr. Beck, "is not one of delirium tremens, as the murder was committed during the fit of intoxication; and it thus rendered him obnoxious to the usual legal enactments."

The difficulty, however, of arriving at a correct conclusion in these cases, arises from another circumstance. In M'Donough's case, the court was of opinion, that the prisoner was aware that *mania a potu* usually followed intoxication, and, therefore, he could not be exonerated from the guilt of his crime by his voluntary state of insanity. Dr. Drake, in reply, states very correctly, that the disease equally arises, sometimes from opium, and even from liquors not taken to intoxication. The law does not look upon drinking to excess as criminal; and the prisoner did not take the liquor with *malice prepense*.

In a civil point of view, intemperance, in some places, in particular, deprives a man of some important privileges. In the State of New York, *in the eye of the law*, an ha-

* Principles of the Criminal Law of Scotland, p. 654.

* Beck's Medical Jurisprudence, p. 47-8, ed. 1836.

bitual drunkard is not considered capable of managing his own affairs. "In the State of New York, we have a statute which places the property of habitual drunkards under the care of the Chancellor, in the same manner as that of lunatics. The overseers of the poor in each town may, when they discover any person to be an habitual drunkard, apply to the Chancellor, for the exercise of his power and jurisdiction. And in certain cases, when the person considers himself aggrieved, it may be investigated by six freeholders, whether he is actually what he is described to be; and their declaration is *primâ facie* evidence of this fact."* This Act was passed March 16, 1821."

In a case cited by Lord Eldon, *Ridgway v. Darwin*, it appears that a commission of lunacy was supported against a person who when sober, was a very sensible man, but being in a constant state of intoxication, he was considered incapable of managing his property.†

Dr. Drake, remarks Professor Beck, some time since, made a suggestion which, if acted upon, would doubtless subserve the ends of justice and morality. "An habitually intemperate man is enfeebled in his mental powers. When summoned as a witness, should his testimony have full weight? Without questioning his [legal] competency, should not his capability be called in question."‡

In the Island of Jersey a law exists, by which an habitually intemperate parent may, on sufficient evidence being adduced, be deprived of the guardianship of his children. This judicious law was put into execution at no very distant period, as the following extract from a journal of that island will show: "LAW OF PARENT AND CHILDREN IN JERSEY.—The Attorney-General appeared before the Royal Court, on Saturday, and called on the Judges to deprive Mr. Nicholas Anthoine, clerk to the impost office, of the right of control or management of his children, he being an habitual drunkard, and that the said court should appoint fit guardians for the said children. The Attorney-General stated, that the persons directed to inquire into Mr. Anthoine's conduct had reported that he had often been seen drunk, and, whilst in that state, had danced in the streets, gathering a crowd around him, and was, consequently, *unfit to be an example to a growing family, and unfit also to be intrusted with its con'trol*. The Solicitor-General, in behalf of Mr. Anthoine, contended, that the articles exhibited were insufficient to warrant the court in inflicting so serious a penalty on any

man, as depriving him of the control of his own family, and instanced his being able to conduct the affairs of his office as a reason against granting the prayer of the citation. The Attorney-General replied again, urging the prayer of the memorial. The chief and other judges confirmed the Attorney-General's demand, and ordered that the defendant's family be given into the guardianship of a proper person, chosen by their nearest relations with the approbation of the court."*

The laws of the same island deprive incorrigible drunkards of their right to vote in affairs of the state, or to receive any appointment, whether parochial or legislative.

Drunkenness may correctly be considered as a species of voluntary insanity. A question therefore arises whether, under such circumstances, it would not be justifiable and humane on the part of the legislature to enact such a measure as would place persons subject to fits of intemperance under temporary confinement or control? The question is one of great importance. A law, indeed, to this effect would not only be an act of mercy to the drunkard himself, but, in its operation, it might be productive of a salutary influence in restraining the prevalence of intemperance. It is a common practice, states Dr. Macnish, in the West of Scotland, to send persons who are excessively addicted to drunkenness to rusticate, and learn sobriety, on the islands of Loch Lomond. Two islands are appropriated for the purpose, where "the convicts," remarks this well-known writer, "meet with due attention, and such indulgences as their friends may think proper to afford to them."†

The validity of a will made by an habitual drunkard, and while under the excitement of intoxication, has sometimes been made a subject of legal inquiry. A bond, however, on the principle of the English law, already stated, executed in a fit of intoxication, holds good, unless evidence be brought forward to show that the party interested in the bond purposely contrived to inebriate the person who signed it.

The decision of a magistrate *upon the bench*, while in a state of inebriation, is, according to the English law, null and void, and the magistrate rendered thereby liable to removal from office.

The evidence, also, of a witness, in a state of drunkenness, does not stand good. At the Surrey Sessions, September, 1837, a young man was acquitted of the charge of stealing a watch from the person of a dancing-master at Camberwell, through the prosecutor and his witness being in an evident state of intoxication when they appeared in the witness-box. The dancing-master also was tipsy when he lost his watch.

* Beck's Med. Jurisprudence, p. 453.

† Collinson on Lunacy, vol. i., p. 71.

‡ Western Journal of Medical and Physical Science, vol. i., p. 81. Beck's Med. Jurisprudence, p. 453.

* Jersey Paper, 1837.

† Anatomy of Drunkenness, p. 222.

In policy insurances upon lives, the concealment of habits of intoxication is deemed a sufficient reason for refusal of fulfilment of the engagement. In two cases of this kind, where it was proved that the individuals in question were at the time apparently hale and healthy, it was decided against the plaintiffs.*

A case of considerable importance to masters and apprentices was decided not very long ago by Sheriff Bell, in the Sheriff's Court, Kilmarnock, and recorded in the journal bearing that name. A shoemaker brought an action against his apprentice for breach of indenture, by leaving his employment, and claimed restoration of his services, or compensation. It was pleaded, in behalf of the apprentice, that he was the only apprentice in the shop; that for some time past, his master had been in the habit

of coming to his work in such a state of intoxication as to be unable to teach him his trade. The proof failed in establishing the allegation that the boy had not made the same progress as other apprentices of his age and experience in his trade; but the Sheriff, after a patient investigation of proof, freed the apprentice from his indenture, on the ground of the pernicious example exhibited by the habitual intoxication of the master, against whom the expenses of the present action were given. *The Sheriff laid it down as a rule that would guide him, that whenever a master showed an example of drunkenness and immorality to his apprentice, he would at once annul the bond that existed between them, whenever he was appealed to, as in the present instance.**

These are some of the most important disabilities which, in the eye of the law, are incurred by the crime of drunkenness.

* East's Reports, 188, Aveson v. Lord Kinnaird and others; 5, Bingham's Rep. 503, Everett v. Desborough.

* Kilmarnock Journal, 1841.

DIVISION THE FOURTH.

SECTION I.

THE HISTORY OF INTOXICATING LIQUORS.

Hæu, mira vitiorum solertia ! inventum est quem admodum aqua quoque inebriaret." PLINY.

"Man is the only animal accustomed to swallow unnatural drinks, or to abuse those which are natural; and this is a fruitful source of a great variety of his bodily and mental evils."

REES'S CYCLOPÆD.

"The art of extracting alcoholic liquors by distillation, must be regarded as the greatest crime ever inflicted on human nature." DR. PARIS.

I. The history of intoxicating wines. II. Intoxicating liquors made from various kinds of grain, fruits, and other substances. III. The history of distilled liquors.

I. *The history of intoxicating wines.* The produce of the vineyard formed no slight proportion of the food of the early inhabitants of the earth. The culture of the vine, therefore, was an object of interest and value. A knowledge of intoxicating wine probably was coeval with the culture of the vine and the preservation of its juice or fruit. Noah was rendered drunk by the produce of his own vineyard.

Inebriating wine has ever been one of the most fruitful instruments of the Prince of Darkness. Nations, and tribes, and sects, have, in various ages of the world, viewed it with disgust and abhorrence, and, in accordance with this feeling, prohibited its manufacture and use. Some striking examples of this kind are narrated in another division of this volume.

The rabbins, or learned Jewish doctors, were of opinion that the forbidden fruit, of which our first parents partook, was the produce of the vine. Lightfoot, and other eminent theologians of modern times, entertained a similar belief. This tradition, doubtless, had its origin in the seductive and injurious influence of wine.

Milton seems to suppose that the fruit,

"whose mortal taste
Brought death into the world, and all our woe,"

possessed inebriating qualities. The passage is as follows:—

"Soon as the force of that fallacious fruit,
That with exhilarating vapour bland
About their spirits had played, and inmost powers
Made err, was now exhaled;—"

Fabricius relates the following rabbinical tradition in relation to the effects of wine:—When Noah planted the vine, Satan attended on the occasion, and sacrificed a sheep, a lion, an ape, and a sow. These animals were intended to be symbolical of the gradations of drunkenness. When a man begins to drink he is meek and ignorant as a lamb; then he becomes bold as a lion; his courage afterwards is transformed into the foolishness of the ape; and at last he wallows in the mire like a sow.*

Plutarch informs us that, previous to the time of Psammeticus, the Egyptians neither drank wine nor used it in their offerings. They deemed it odious to the gods, and the blood of those who had contended with them in war, that is, of the giants, and in particular of the evil deity Typhon and his adherents. The tradition further states, that the vine sprang up from the slain whose bodies had mingled with corruption. Hence the reason, says the same writer, why wine makes those who drink it furious and frantic.†

This tradition most probably had its origin in the policy, moral as well as political, of the early legislators of Egypt.

The Persians relate the following anecdote in reference to the invention of wine; It is extracted from Moullah Ackbers M.S.S.; and is quoted by Sir James Malcolm, in his History of Persia. Jem Sheed, the founder of Persepolis, was immoderately fond of grapes, and, with the view to preserve some, placed them in vessels which were lodged in vaults for future use. When the vessels were opened it was found that the grapes (or rather the liquor which had issued from them) had fermented. The juice in this state was so acid that the king believed it to be poisonous. A label, with the word "*poison*," was accordingly placed upon each of the vessels. One of the favourite ladies of the court was afflicted with most distressing attacks of nervous headache, in a paroxysm of which she resolved to put an end to her existence. By accident she found one of the vessels with the word "*poison*" written on it, and, intent on her purpose, swallowed its contents. Stupefaction, as might be expected, followed this act, and strange to say, unlike similar indulgence in modern times, her headache was gone. Charmed

* Warton's Dissertation on the Gesta Romanorum.

† De Oside et Osiride, sec. 6.

with the remedy, the lady was induced often to repeat the experiment, until the monarch's poison was all drunk. The theft was soon discovered, and the fair culprit confessed the deed. A quantity of wine was again made, and Jem Sheed and all his court partook of the newly-discovered beverage. This circumstance gave rise to a name by which inebriating wine is known in Persia in the present day—Zeh-e-Koos-hou—"the del ghtful poison."*

The Manichæans attributed the invention of wine to the devil. St. Augustin blames them for their perverseness, inasmuch as they refused to take wine, while they did not scruple to eat grapes.† St. Augustin appears to have entertained a notion which even in our own days is not without its advocates, that fermented wine is a "good creature of God," and, therefore, to be received with thanksgiving. The distinction between *wine* and *must*, (or, in other words, *unfermented wine*;) as Michaelis observes, is a luminous one,‡ and all persons must admit that, in a moral as well as physical point of view, a considerable difference exists between *cooling* and *nutritious* fruits and *stimulating* and *inebriating* wine. This erroneous notion appears to have been prevalent among those Christians of the few first centuries, who were converts from among the Gentiles, and whose habits and notions, in many respects, differed from the Jews. Severe enactments are found in those canons which are denominated apostolical, in relation to officers of the church, who abstained from marriage, and flesh, and wine, out of abhorrence, and not for mortification; thus casting reproach, as the canons allege, on the workmanship of God.§ The sects, however, on whom this censure fell, entertained heterodox opinions on matters of faith. No analogy, therefore, exists between these parties and persons holding similar views, in reference to wine, in the present day.

Theodoret remarks of Tatian, one of the Greek fathers, who flourished A. D. 172, *την ουτε οινου μεταληψιν βδελυττεται*, "he abhors the use of wine."* Tatian consecrated bread and water alone for the Eucharist.

The *Hydroparastata* and *Encratites* entertained similar notions. St. Epiphanius, bishop of Salamis, in reference to the Encratites, says: *Οινον ὅλως ὃν μεταλαμβάνουσι, φασκοντες εἶναι διαβολικόν και τους πίνοντας καὶ τοῖς χρωμένους, ἀνόμους εἶναι καὶ ἀμαρταῆς*, "they did not use wine at all, saying, that it was from the

devil; and that drinking and using it was wicked and sinful.*

The same divine also remarks of the *Severians*, that *ἀπείχονται οινου παντελῶς*, "they abstained altogether from wine."†

Severus flourished in the time of Pope Sotherus. His disciples condemned wine as a creature of Satan.‡ Epiphanius tells us, that they believed it to be engendered by serpents. Hence the reason why wine is so strong. Photius *de Agapio*, concerning the same sect, observes, that, *Τον οἶνον, οἷα εἶη μεθυστικόν, ἀποστρέφονται*, "they were averse to wine as the cause of drunkenness."§ The Essenians were accustomed to term wine "fool's physic."

St. Basil the Great, bishop of Cæsarea, in Cappadocia, in his first canonical letter to Amphilocius, bishop of Iconium, written A. D. 370, says, in reference to the Marcionists, *Αποστρέφονται τόν οἶνον*, "they are averse to wine." This sect asserted that wine was defiled, and not a creature of God.||

The Koran of Mahomet makes a wise distinction between the refreshing and nutritious juice of the grape and intoxicating wine. "*Of the fruit of the grape*," says the prophet, "ye obtain an *inebriating liquor*, and also *good nourishment*."¶ The dread which the Mahomedans entertained, in days of yore, in relation to inebriating wine, gave rise to an adage well known among the Turks, "There lurks a devil in every berry of the vine." In allusion to this proverb, one of our poets remarks in similar language, "The berries of the grape with furies swell."

The Arabians designate inebriating wine as "the mother of evils;" an appellation singularly appropriate and expressive. The records of history teem with melancholy examples of its direful effects. Goli, in his Arabic Lexicon, introduces the word *vinum* (wine) and the phrase *mater malorum* in that language as synonymous in meaning.**

Our knowledge of the mode in which the ancients prepared their inebriating wines is limited and obscure. Certain of these wines, doubtless, were rendered more or less intoxicating by fermentation; others were rendered potent by the aid of inebriating drugs. A third and numerous class, on the other hand, in particular at a more remote period, were prepared in such a manner as to render the presence of alcohol, at least to an extent capable of producing intoxication, an utter impossibility. The latter class of wines will receive due consideration in subsequent sections.

The productions of Pliny, Palladius, Cato,

* Malcolm's History of Persia, vol. i., p. 16.

† Quæ tanta perversio est, vinum putare, Fel principis tenebrarum et avis comedendis non parcere.—Augustin de Morib. Manichæor, lib. ii., sec. 44, tom. ii., p. 752, ed. Bened.

‡ Michaelis Comment. on the Law of Moses, vol. 3, p. 131-2.

§ Apostolical Canons, 43-45.

|| Theodoret. haret. fab., lib. i., cap. 20, ¶ p. 208.

* De Encratitis, hares, 47, p. 174.

† Ibid., 47, p. 170.

‡ Du Mont, Voyage, tom. iii, lit. 5.

§ Biblioth. Cod., 179, p. 404.

|| Canon of St. Basil, can. 47.

¶ Hale's Koran.
** Jacobi Goli Lexicon, Arabico-Latinum, &c., Lugduni, Batav. p. 677.

and Columella among the Romans, of Athenæus and the Geoponic writers among the Greeks, and the scattered and often vague allusions of the poets and other writers of ancient times, form the chief sources from whence we alone can acquire information on this interesting subject. Even these writers leave many important details in unfortunate obscurity.

The culture of the vine descended from the Egyptians to the Asiatics and Greeks. The latter people acquired great celebrity in the manufacture of their wines.

The Italians at a later period carried this art to high perfection. The soil of Italy was peculiarly favourable to the culture of the vine. Italy, indeed, became known among nations as *Oenotria*, the country of wines. The inhabitants of Italy were denominated *Oenotrii viri*, the cultivators of wines. Hence Virgil,

“Oenotrii coluere viri.”

Innumerable varieties of grapes were produced in this fertile climate. Virgil thus describes the most valued kind of grapes in his time, and their various uses:—

“Non eadem arboribus pendet vindemia nostris
Quam Methymnæo carpit depalmitæ Lesbos
Sunt Thasiæ vites, sunt et Mareotides albæ,
Et Passo psythia utilior, tenuisque lageos
Tentatura pedes olim, vinetaque linguam
Purpure, Preetiæque, et Rhetica.
Sunt et Aminææ vites firmissima vina
Argitisque minox, tumidis Bumaste racemis
Et Rhodia.”

The same distinguished poet informs us that we may with as much ease attempt to enumerate the sands on the Lybian coast, as to specify the various species of wines then made.

Sed neque quam multæ species, nec nomina quæ
sint
Est numerus; neque enim numero comprehendere
refert,

Quem qui seire velit, Lybiei velit œquoris idem
Discere quam multæ zephyro turbentur arenæ;
Aut ubi navigiis violentior incedit Euris
Nosse, quot Ionii veniant ad littora fluetus.

Georgics, lib. ii.

The *Campania Felix*, a name given to that portion of Italy which borders on the Mediterranean, because of the excellence of its soil, was peculiarly distinguished for its growth of vines. L. Florus eulogises this fertile tract of land in encomiastic terms.* Pliny also speaks in warm language of the reputation of its wines. The *Ager Falernus* is in particular specified by this writer. The highest portion of this tract, afterwards known by the name of *Massicus*, was at one period denominated the *Gaurus*. The middle portion was named the *Faustianus*, and the Falernian, strictly so called, occupied the lowest portion of all. The *Calenus Formia*, as well as its contiguous hills, are included

by some writers under the same denomination. The wines produced from all these hills were usually classed under the general appellation of *Massic* or *Falernian*.

Canillus Perigrinus, in his elaborate dissertations on this subject, shows that *Massic* and *Falernian* were synonymous terms, and were applied to the same kind of wine.* Columella, by the term *Massic*, includes all the wines of the *Ager Falernus*. In his enumeration of the most valued wines of Italy, he makes mention only of the *Massicum Surrentinum*, the *Albanum*, and the *Cæcubum*.

The qualities of these wines perhaps differed more than their names. Pliny divides them into three kinds. The first class he describes as rough and harsh, the second as sweet and pleasant, and the third as light and weak. It is a difficult matter to determine to which kind many of the heathen writers refer in their various productions. The *Faustian* wine would appear to have been very strong. Pliny remarks that *solo vinorum flamma accenditur*, it was the only wine which would kindle on contact with a flame. The *Falernian* wine, strictly so called, evidently did not belong to the class of thick or nutritious wines.† Galen, in his book, *De Cibo*, leads us to infer that some wines of this class were moderately sweet, a condition which is not incompatible with a certain degree of alcoholic strength. He remarks, that of the yellow and ruddy wines, some were moderately sweet; as for example, the *Hippodomantian*, *Faustian*, and *Falernian*. Other wines, he further observes, were entirely devoid of sweetness. Ruellius affirms, that all the *Falernian* wines were *amber* in colour. This fact accounts for their want of sweetness. All the very sweet and unintoxicating wines were either black or red, the colour of the juice from which they were made. No white or very thin wines, as Galen informs us, were sweet.—One species of *Falernian* wine possessed a very agreeable odour, a property which it probably derived from the common practice in those days of blending their wines with aromatic perfumes. Martial compares the scent emitted from a cask of this wine, when opened, to the sweet breath of *Diamona*.

During the infancy of the Roman state, wine was rarely used, except on sacrificial occasions. In the time of Homer, the vine grew wild in Sicily and the neighbouring shores. In a thousand years afterwards, the Italians could boast that there were at least four-score various kinds of wine then in use, more than two-thirds of which were produced in their own country. This number, however, included those only which were held in most esteem. Pliny informs us, that

* Dissert. 2, de Campania Fælicæ Thesaur. Antiq. Rom., tom. ix., pars. 2.

† Galen, De Atten. Diæt. Comment., lib. i., § 5.

* L. Florus, lib. i., cap. 16.

the luxurious Romans had no less than 195 general varieties of wines in use, but that a subdivision of their species would amount to twice as many more.* It would be impossible in the present treatise to enumerate the names of these different wines. Pliny and other writers dwell largely on their titles, and the districts in which they were produced. The writings of the poets, also, contain scattered allusions to the wines held in most esteem. The latter sources of information, however, afford meagre details in reference to the nature and qualities of those wines, which form the subjects of their glowing effusions.

The renowned wines of Homer occupy, perhaps, the most prominent place in the writings of the ancients. The wines of the Opimian vintage among the Italians acquired equal celebrity. Greece and the islands of the Archipelago had their Pramnian, Phœcean, Lesbian, Chian, Rhodian, Coan, and numerous other wines. The Tmolus of Lydia, the Marcotic and Tæniotic of Egypt, the Byblos of Phœnicia, the Mendacan of Thrace, and the Lebanon and Helbon of Palestine, were each celebrated for some peculiar excellence of flavour. It is certain, however, that many of these wines differed in several respects from the wines of modern manufacture. Those of Asia and Greece, in particular, or at least a great proportion of them, were thick, rich, nutritious and un-intoxicating wines.

In order to arrive at a correct knowledge of the habits and practices of the ancients in reference to wine, several important particulars must be kept in view. The wines of the Greeks and Asiatics differed in many respects from those of the Romans. Even the Italians themselves were almost as diversified in their tastes as the revolving years. The favourite wine of one period was at no distant date displaced by some new invention of luxury. Pliny assures us, that the grapes called *Thasie*, *Marcotides*, and *Lagere*, so lauded by Virgil, were not to be found in his time in any part of Italy.† The Cæcuban wine, in its day, was held in great esteem; but when Pliny wrote his celebrated work, it was entirely lost.‡ These observations hold good also in relation to the nature of ancient wines. Tastes degenerated as well as wines; and the simple, un-intoxicating wines, which satisfied the demands of primitive ages, were rejected for the costly and drugged liquors of more modern invention. This subject will receive more ample consideration in succeeding sections.

In later centuries, the mode of preparing un-intoxicating wines was almost entirely lost. Andreas Baccius, a learned writer of the sixteenth century, who made the history of wine a subject of elaborate investigation,

remarks, in reference to those prepared in Italy in his day, that they differed altogether from ancient wines, both in their preparation and quality; *nam nostra dulcia, et alba, ut etiam nigra inebriant*, “for our sweet wines, and white, us also black wines, intoxicate.”* This decisive passage is introduced in the present place to warn the reader not to confound the sweet wines of the ancients with those of comparatively modern times. It will, hereafter, be shown, that they differed, in many respects, both in their mode of preparation and qualities.

Father Stephen Lusignan observes of the Cyprus wines of his day, that they were so strong that they would *kindle in the fire and burn like oil*. Chaucer thus alludes to the strength of the white wine of Lepe (Niebla, near Seville), in Spain,—

Now kepe yon fro the white and fro the rede,
Namely fro the white wine of Lepe,
That is to sell in Fish-street and in Chepe:
This wine of Spain crepeth subtilly,
And other wines growing fast by,
Of which riseth soch fumositie,
That when a man hath dronk draughts thre,
And weneth that he be at home in Chepe,
He is in Spain, right at the tounne of Lepe.
Gardener's Tale.

Early attempts were made by the Romans to introduce the growth of the vine into the British empire. Wine, according to Speed, was manufactured in almost every monastery.† The Isle of Ely, in particular, became so celebrated for the fruitfulness of its vintage, as to be called the “Isle of Vines,” and the bishop, soon after the conquest, exacted tithes from the vineyards. The vine, however, has never been cultivated in this country to any great extent. Our French conquests, indeed, placed within our reach wines of a superior quality.

The wines chiefly drank in the fourteenth century are thus enumerated by a poet of that period :—

Ye shall have ranney and malespine,
Both ypoocrasse and vernage wyne;
Mornitrese and wyne of Greke,
Both algrade and despiec eke,
Antioche and bastarde,
Pymment also; and garnarde,
Wyne of Greke and muscadell,
Both clere, pymment and rochell.

Warton's Hist. Poet., vol. i., p. 177.

The taste for sweet wines, even at this period, was almost universal. Wines were so abundant in this country in the fourteenth century, that when King Richard II., after a long absence, was greeted by the inhabitants of London, the very conduits in the streets through which the procession passed were allowed to run with every variety of liquor.‡ In the same century the quantity of wine entered in the household expenses

* Nat. Hist., lib. xiv., cap. 22.

† Ibid., lib. xiv., cap. 3.

‡ Ibid., lib. xiv., cap. 6.

* De Nat. Vin. Hist., lib. ii., cap. 7.

† Speed's Chron.

‡ Maitland's History of London.

of Thomas Earl of Lancaster, as consumed during one year, was not less than 371 pipes.*

In the reign of Edward IV., A. D. 1470, at the installation feast of the Archbishop of York, one hundred tuns of wine, and three hundred tuns of ale, making a total of more than 100,000 quarts of intoxicating liquor, were provided for the entertainment. It is proper, however, to state, that these beverages were not of the same alcoholic strength as the wines and ales in use in the present day.

The price of wine was in proportion to its abundance. Rochelle, or Poictu wine, A. D. 1199, was sold for twenty shillings the tun, or fourpence for the gallon. Wine of Anjou was sold for twenty-four shillings the tun, or sixpence the gallon. No other French wines were allowed to be vended for more than twenty-five shillings the tun, a price, however, which was soon increased to sixpence and eightpence the gallon. Need we wonder that the historian observes, as a consequence of this state of things, that the land was filled with drink and drunkards? In the thirteenth century the best wine could be procured at the rate of forty shillings for thirty-six gallons, and sometimes even for less.

It would not be within the limits of this essay to enumerate the great variety of wines used in the present day, as well as their modes of preparation and their peculiar properties. A remark which Howell, made A. D. 1634, will apply with equal appropriateness to the wine districts of the nineteenth century. "As in Spain, so in all other wine countries, one cannot pass a day's journey but he will find a differing race of wines."†

At that period the same writer states, that "Portugal afforded no wines worth transporting." The wines of Portugal now form a staple article of consumption. Of Canary wines, Howell speaks in warm terms.—"French wines," he remarks, "may be said but to *pickle* meat in the stomach, but this is the wine that *digests*, and doth not only breed good blood, but it nutritieth it also, being a glutinous substantial liquor." In his quaint, but pointed phraseology, Howell tells us, "that of this wine, if of any other, may be verified that merry induction, that good wine maketh good blood, good blood causeth good humours, good humours cause good thoughts, good thoughts bring forth good works, good works carry a man to heaven, *ergo*, good wine carrieth a man to heaven. If this be true," adds Howell, "surely more English go to heaven this way than any other, for I think there's more canary brought into England than to all the world besides." The wines of Portugal now supersede those from the

"Grand Canary Island," in which our ancestors indulged with no sparing hand. It is a fact, moreover, that more port wine is consumed in Britain than in all the world besides. Such also is the nefarious practice of modern wine merchants, that, probably, in England, as in the United States, the consumption of (so called) port wine exceeds the whole annual produce of the Alto Douro. Our progenitors, it seems, were liable to similar imposition. Howell says, "I think there is a hundred times more drank under the name of Canary wine than there is brought in, for *Sherries* and *Malagas* well mingled pass for Canaries in most taverns, more often than canary itself, else I do not see how 'twere possible for the vintner to save by it, or to live by his calling, unless he were permitted sometimes to be a brewer. When sacks and canaries were brought in first among us, they were used to be drunk in *aqua vite* measures, and 'twas held fit only for those to drink of them who used to carry their *legs in their hands, their eyes upon their noses*, and an *almanack in their bones*, but now they go down every one's throat, both young and old, like milk."* Howell evidently alludes to the *aged* and *infirm*, who were necessitated to use *crutches* wherewith to walk, *spectacles* to strengthen their sight, and whose infirm bodies were affected by *every change of season*. This ingenious and learned writer details many more curious particulars in reference to inebriating drinks.

II.—*Intoxicating liquors made from various kinds of grain, fruits, and other substances.*—The art of producing intoxicating liquors from various kinds of grain and fruits, had its origin at a remote period. Some writers attribute this invention to those tribes or nations whose poverty did not allow them to indulge in the use of wine. Seneca, in reference to this subject, says, *quædam gentes beneficio paupertatis luxuriam non movere*, "that certain nations were not able to indulge in the luxury because of their poverty."† A more numerous class of writers attribute the invention to the inhabitants of those districts in which, from the poverty of the soil or other causes, the vine was not grown. Julian, the apostate, in his epigrams, says of the Gauls and Celts, that they were not able to drink wine, τῇ πενυῇ βοτρυῶν, *because of the want of vines*. Diodorus affirms the same thing, στερισκομένους οἴνου.‡ Isidorus, in reference to the people of Spain, states, that in his time they made liquors from fruits or grain, *quod ferox vini locus non esset*, "because the country was not fruitful of wine."§ Strabo also informs us,

* Anderson's Hist. of Commerce, An. 1313.

† Familiar Letters, letter lv.

* Ibid., letter lv.

† Seneca, lib. iii., de Ira.

‡ Lib. v., chap. 26.

§ Isid. Orig., lib. xx., cap. 3.

that the Lusitanians in Spain use *zythum*, but have little wine. *Χρῶνται δὲ καὶ ζυθον, οἶνῳ ἀσπαρίζονται.* Dion Cassius has the following passage: "The Pannonians, who inhabit the banks of the Danube, have neither oil nor wine, except very little, and that little very bad; they eat barley and millet, and from these two kinds of grain they make a drink." Herodotus, concerning the Egyptians, tells us that they had no vines in that region, *ὅτι οὐκ ἦσαν ἐν τῇ χωρᾷ ἀμπελοι.* Dion Academicus, as cited by Athenæus, also states that the Egyptians were not possessed of wine because of their poverty, *δία πενίαν ἀποροῦντες οὔτε οἶνον.* These statements, however, must be received only in a limited sense. It is certain that at one period, at least, the culture of the vine was not unknown to the Egyptians.*

Diodorus ascribes the invention of liquors from grain to Osiridis and Bacchus. This writer, *De Osiride*, tells us that if in any part the earth did not admit of the culture of the vine, Osiris taught the people how to prepare a liquor from barley, not much inferior to wine in fragrance and strength. The same writer, *De Baccho*, again states, that in those districts where the earth was unfriendly to the culture of the vine, they made a drink from barley a little inferior to wine in excellence of taste.† Diodorus makes a similar statement, for the third time, in a subsequent book. Xenophon, in reference to the οἶνος κριθίνος, *oinos krithinos* of the Armenians, speaks in different terms as to its strength. He describes it as strong and pleasant to those who are accustomed to its use. "Their soil," he continues, "is good for arable and pasture, and the produce abundant, yet the people inhabit caves with their cattle, poultry, &c. They fill open vessels with barley and water to the brim."‡

The ancients called those liquors which were made from barley οἶνοι ἐκ κριθῆς (wines from barley). Tacitus speaks of this kind of liquor as *potum in vini similitudinem corruptum*, "a corrupt or inferior drink having the resemblance of wine."§ Most ancient writers denominate this liquor "wine," "barley wine," and "wine made from barley." Thus Herodotus uses the words οἶνῳ ἐκ κριθῶν διαχρησθῆναι, "they were accustomed to use wine from barley." Athenæus terms it οἶνον κριθινόν (barley wine). Theophrastus speaks τοῦς οἶνοῦς ποιοῦντων ἐκ τῶν κριθῶν, "of those persons who made wine from barley." Hesychius and Suidas both define *zythum* to be δρον ἀπο κριθῆς γινόμενον, "wine made from barley." Æschylus makes use of a similar expression, ἐκ κριθῶν μεθον, "wine from barley."

The names by which these liquors were known, in ancient writers, are various. Posidonius, the stoic philosopher, tells us, that in his time men of more humble condition among the Gauls and Celts made use of ζυθος, *zythum*, made from wheat, prepared with honey. Usually, however, it was drunk by itself. It was called, κορμα, *corma*.

Dioscorides uses the same term, with but a slight alteration in the orthography. A drink, he remarks, named κοῦρμα, *carmi* or *courmi*, is used in the place of wine. Other writers term the οἶνος κριθίνος of the ancients, βρυτον, *brytum*. Thus Hesychius renders βρυτον, *brytum*, πόμα ἐκ κριθῆς, a drink from barley. Hecateus also, in his *Ἑβρωπικῆς*, informs us that the Pæonians call a drink made from barley, *brytum*. Hecateus flourished more than five centuries before Christ. The same writer states, that another drink, called *parabia*, was made from millet and conyza.* Οἶνος κριθίνος, *oinos krithinos*, or barley wine, was also denominated *sabaga*, or *sabagum*, and sometimes *sabajarius*. Ammianus tells us, that in Illyria, a very poor liquor (*paupertinus potus*), made from barley or fruit, is called *sabaga*. Jerome describes *zythum* as a kind of liquor made from grain and water, and common in the provinces of Dalmatia and Pannonia. He further informs us that among barbarous nations it was called *sabagum*.

All ancient writers, however, agree that "barley wine" was termed in Egypt ζυθον, *zythum*. "Western nations," says Pliny, "intoxicate themselves by means of moistened corn. A drink thus made is called *zythum* in Egypt, *celia* and *ceria* in Spain, and *cerevisia* in Gaul and other provinces."† Most writers among the Greeks use this word. Theophrastus speaks of wines made from barley and wheat, which are called *zythum* in Egypt.‡ Strabo, in reference to the Egyptians, testifies the same thing. *Zythus*, he remarks, is in particular made in that country: τὸ δὲ ζυθος ὡς παρὰ σκευάζεται παρ' ἐκείνοισι. Diodorus, in two places, speaks of *zythum* as a drink made from barley. Galen mentions *zythum* as made at Alexandria in Egypt. Posidonius and other writers testify the same thing. Columella associates with *zythum* the name of Pelusium, a city at the mouth of the Nile; hence barley wine is denominated by some writers the *Pelusian drink*:—

Sectaque præbatur madido sociata iunio,
Ut Pelusiaci proritet pocula zythi.

COLUMELLA, lib. x

Pliny, in the passage quoted above, mentions *celia* and *ceria*, as names applied to barley wine. Florus also speaks of this kind of drink under the name of *celia*, and

* Psalm lxxviii., 47.

† De Baccho, lib. iii., cap. 73.

‡ Xenophon, Anabasis.

§ Tacitus de Morib. German.

* Athenæus, lib. x.

† Nat. Hist., lib. xxii., cap. 25.

‡ Theophrast. Hist. Plant.

add, *sic vocant indiginæ ex frumento potionem*, “so they term a liquor made from grain.” It seems probable that the words *cervisia* or *cerevisia*, and *celia* and *ceria*, had a similar origin. They evidently had reference to the same kind of liquor, *liquor cerealis*, or “liquor of corn.” Ceres was the goddess of corn, or, indeed, of grain, as a general class; and in the orthography of the words under consideration, there is but an inconsiderable difference. Ovid refers to this subject in his celebrated production. In relating the meeting which Ceres, who was exhausted with weariness, had with Baubo, an aged female, the former requested some water to recruit her exhausted strength; the old woman, however, presented her with a liquor manufactured from dried grain.

Simon Sethi, in his work on Aliments, mentions a drink called *Φοκας*, *phoca*; and, as Meitomius remarks, ascribes to it qualities precisely similar to those which Dioscorides attributes to *zythum*. The Arabs variously name it *fuca*, *foca*, and *alfoca*. Simon Januensi in *Synonymis* uses the words *cervisia*, *camum*, and *joca* as having reference to the same drink. We may determine, therefore, that *phoca* was made from grain. Matthæus Silvaticus in *Pandectis*, cap. 271, indeed states that it was made from barley, and mixed with ginger and other warm articles. *Φοκας*, *phokas*, or *φοσκα*, *phoska*, evidently is, in many respects, identical with the *posca* or *pusca* of the Romans. It was probably often used in a semi-acetous state, and drunk during summer to allay the pangs of thirst.

The ancient British became acquainted with the art of producing the “wine of corn,” soon after the introduction of agricultural pursuits. Isidorus and Orosius, about the commencement of the fifth century, thus describe the manner in which beer was made among the British and the Celtic nations: “The grain is steeped in water, and made to germinate; it is then dried and ground; after which it is infused in a certain quantity of water, which, being fermented, becomes a pleasant, warming, strengthening, and intoxicating liquor.”

Dioscorides tells us, that the ancient Irish (*Hiberi*), at least those who resided in its western parts, as well as the Britains, made use of *curmi*, or wine made from grain, at an early period. His words are, *Σκευαζεται δε (και) εκ πυρων τουαντα ποματα ως εν τῇ προς ἑσπερων Ιβηρια και Βρεττανία*. Dioscorides flourished about the commencement of the Christian era. Camden contends that *curmi*, in this place, is corruptly written for the ancient British word *cwrw*, which signifies *ale*. The latter word, as we shall shortly see, is probably derived from the Danes, who term the same kind of liquor *oel* or *oela*. Julian, the apostate, in an epigram, terms this liquor *the offspring of corn and wine without wine*.

The German tribes placed a high value

on this exhilarating liquor. The Saxons and Danes, previous to the introduction of Christianity, supposed that “to drink large and frequent draughts of it was one of the greatest pleasures enjoyed by the heroes admitted into the hall of Odin.”* Beer was probably referred to in the following passage: Radner Lodbrog, the last king of Scandinavia, having been taken prisoner, in a descent which he made upon England, was put to a cruel death. In the agonies of torture he uttered the following language: “We fought with swords. I am still full of joy when I think of the banquet that is preparing for me in the palace of the gods. Soon—soon, in the splendid abode of Odin, we shall drink out of the skulls of our enemies.—But it is time to cease. Odin hath sent his goddesses to conduct me to his palace. I am going to be placed on the highest seat, there to quaff goblets of beer with the gods. I will die laughing.”†

Wormius refers to *heather-beer*, a liquor made from heath, probably mixed with honey, or some sweet substance, to render it palatable, as one of the pleasures which the souls of departed warriors enjoyed in the society of the gods.

The following authorities show that liquors from grain were in common use in this country at an early period: Eumenes, in his panegyric on Constantius, A.D. 296, observes, “that Britain produced corn in such abundance, that it was sufficient to supply not only bread but also a *drink* which was comparable to wine.”‡ A writer of great erudition thus alludes to the habits of St. Finnian of Clonard, one of the two sees of Meath. This pious individual died, A.D. 552. “Finnian was distinguished not only for his extraordinary learning and knowledge of the Scriptures, but likewise for his great sanctity, and austere mode of living. His usual food was bread and herbs, his drink water. On festival days he used to indulge himself with a little fish and a cup of *beer* or whey.”§ Jonas Scotus, in his Life of Columbanus, (embracing a period between 589 and 610,) makes allusion to ale (*cervisia*), “which is bruised from the juice of wheat and barley, and which, above all the nations of the earth, except the Scots and Dardans, who inhabit the borders of the ocean, those of Gaul, Britain, Ireland, and Germany, and others who are not unlike them in manners, use.”|| This memoir was written about A.D. 640. In the year 694, Ina, king of Wessex, directed that every one who possessed a farm of ten hides of land should, among other articles, pay to him twelve ambers of Welch ale, each of which contained above seven gallons of English wine measure. The Saxon Dialogues pre-

* Mallet's Northern Antiq., chap. vi.

† Mallet's Edda.

‡ Macpherson's Annals.

§ Ecclesiast. Hist., c. x., s. 5.

|| Jonas Scotus, in Vita Columbani, cap. 16.

served in the Cotton Library of the British Museum, record the following reply of a boy, who, when questioned upon his habits, and in particular as to what he drank, said, "Ale, if I have it, or water, if I have it not." "Wine," he further remarks, "is the liquor of the elders and the wise," by which we may infer, that it was a more costly and rare beverage. Even in these early days ale was sold at houses of entertainment; "for a priest was forbidden by law to eat or drink at *ceapealethetum*," literally, a place where ale was sold.

Beer and ale appear to have formed important items in the banquets of olden times. Malt liquor constituted a part of the feast provided in the eleventh century for Edward the Confessor. It has already been shown, that in the fifteenth century, in the reign of Edward IV., three hundred tuns of ale were prepared for one feast alone. A favourite wassail or drinking song of this period has for its burden

"Bring us home good ale."

Camden calls the yeomen of this period "the old ale-knights of England." Harrison, as we have seen in a previous section, details some curious particulars relative to these worthies.* At an entertainment, given by the Earl of Leicester, in Kenilworth Castle, to Queen Elizabeth, three hundred and sixty-five hogsheads of beer alone were consumed. On the supposition that twenty-three thousand persons were present on that occasion (an improbable conjecture), not less than one gallon of ale would fall to the share of each individual. Intemperance and riot, doubtless, characterized this profuse feast. The consumption of malt liquors must have been greatly increased by the easy rate at which they could be procured by all ranks of society. Spiced ale (double the price of common), in the eleventh century, was sold at 8d. per gallon. In 1251, the law enacted, that in cities a brewer might sell two gallons of ale for a penny, and in the country three or four gallons for the same price.† A penny at that period was in value about three-halfpence in the time of the modern historian from whose work this fact has been quoted. In 1315 and 1316, according to Bishop Fleetwood's *Chronicon Preciosum*, good ale was 2d. per *lagenam* (flaggon or gallon). The better sort was 3d., the best 4d., and the viler, or more inferior kind, 1d. In 1445 and 1451, ale was 1½d. a gallon. In 1453, however, it was 1¼d.; while, in 1457 and 1460 it was sold for a 1d. per gallon. In 1471, the maximum price of the best ale was fixed by Act of Parliament at 1½d. per gallon. In 1504, London ale was sold at £1. 10s. per butt of one hundred and twenty-six gallons, or nearly 3d. per gallon. Hollinshed in-

forms us, that, about 1550, the cost of beer was 1¼d. for the same quantity.

Our ancestors, who, as preceding facts show, were conspicuous for their bibulous propensities, had stated times for indulgence in malt liquors. Some of these were even associated with the officers of the church, and were supported by joint contributions, —such as *leët ale*, *clerk ale*, *church ale*, *bride ale*, and a variety of others. The latter custom is even still followed in some parts of Scotland, under the name of *penny bride ale*, having for its professed object the assistance of those poor persons who are unable to defray the expenses of a wedding dinner.*

The association of strong drink with church buildings and religious occasions has already received lengthened consideration. In the fairs held at Camberwell, it is stated, that the booths were erected in the churchyard for the sale of "good drink, pies, and pedlarie trash." William Keth, in a sermon preached at Blanford-Forum, Dorset, January, 1570, states, that in his time it was usual to keep the church ales on the Sabbath day, which holy day, says the same divine, "the multitude call their reveling day," which day is spent in bulbeatings, beare beatings, bowlings, dieying, cardying, dannsynges, drunkennes, and whoredome." It is to be lamented, that several of these profane customs are practiced in our towns and country villages even in the present day. Herrick, in his *Hesperides*, in describing the country wakes, in reference to the "happy rustics," has this line:—

"Drencht in ale, or drown'd in beere."

Hesperides, p. 300.

Macaulay, in his *History and Antiquities of Claybrook, Leicestershire*, observes, in regard to wakes, that "the return of the wake never fails to produce a week at least of idleness, intoxication, and riot; which consequences," he further remarks, "renders it highly desirable to all the friends of order, of decency, and of religion, that they were totally suppressed."†

The etymological origin of the words *ale* and *beer* involves a curious and not uninteresting subject of research. Learned writers variously derive the word *beer*. The Germans term drink made from grain *biera*, or *bira*, and hence the phrase *la biere*.—Vossius deduces the word *biera* from the latin *bibere*, and endeavours to strengthen his views by some ingenious arguments.—He supposes *bier* to be a simple variation or contraction of the latin *biber* (a drink), and *bira* to be a general term expressive of all similar liquors.‡ Other writers derive beer from *βύριν*, a Greek word, which, according to Aetius, signifies *malt*, or macerated and

* Division 1, sect. 2, pp. 29, 30.

† *Holme*, vol. ii. p. 233.

* Supplem. vol. *Encyclop. Britan.*

† *Hist. and Antiq. of Claybrook, &c.*, 1791, p. 93.

‡ Vossius, *Arth. Gram. lib. iii., cap. 26.*

toasted barley.* Ruellius suggests that *biria* or *beria* is a mere variation of one letter from *ceria*, the letter *b* being substituted for *c*.†

Martinius, in his *Philological Lexicon*, under the head *cervisia*, derives beer *a pyris*, from the Latin word for a *pear*, from which fruit he supposes the drink to have been made. This, doubtless, is an error. Melchior Goldastus, however, adopts a different view. He argues, that a distinction exists between the words *bira et biera*. The former, *bira*, he supposes to be derived from *pirum*, and to be a drink made from the juice of pears. *Biera*, he deduces from the Hebrew *beri*, בֵּרִי, which signifies *frumentum*,

or all kinds of grain or corn; from whence we have *beriah*, בֵּרִיָּה, a word which sig-

nifies *pulmentum farinaceum*, farinaceous pulse. Meibomius says he has no doubt but that the word *biera* was common to the Celts. Cluverius also inclines to the derivation propounded by Goldastus. He deduces the word *bier*, or, as the Saxons write, *beer*, from the Hebrew בֵּרִי, *bar*, which is the same word as the Latin *frumentum*. The Polish or common mode of pronouncing this word is *bare*, soft, and not *bar*. Cluverius supposes the word be one of very remote origin.

The derivation of *ale* appears to admit of equal debate. Ruellius derives *ala* from *alica*, or a peculiar kind of corn. *Ala*, however, is not made from *alica*, or corn, but from *triticum*, or wheat.‡

The Cimbri, Chersonesi, and inhabitants of the neighbouring islands, denominate all drink made from grain, *oelā* or *oel*. Pontanus, in his valuable glossary, derives the *celia* of the Spanish from *oela*. He argues, that *oela* or *oelia* were primitively written *coelia* or *celia*; and that the difference between the more modern and ancient mode of diction simply arises from the omission of the letter *c* in the former word.

Mr. Douce, and other modern writers, are of opinion that, from its use in composition, the word *ale* signifies nothing more than *a feast or merry-making*; as, for example, in the words *Leet-ale*, *Lamb-ale*, *Whitson-ale*, *Clerk-ale*, *Bride-ale*, *Church-ale*, *Scot-ale*, *Midsummer-ale*, and numerous others of a similar character. "Ale," observes Mr. Douce, "was the predominant liquor at all these feasts, and it is exceedingly probable that the metonymy arose from this circumstance." Dr. Hicks corroborates this view. He states, that the Anglo-Saxon *leol*, the Dano-Saxon *iol*, and the Icelandic *ol*, respectively have the same meaning. "Perhaps," observes Mr. Douce, "Christmas was called by our northern an-

cestors *Yule*, or the *Feast*, by way of pre-eminence.

The difference between *ale* and *beer* is a subject of equal interest and more practical nature. Harrison, the historian, informs us, that the word *ale* was employed to designate a malt liquor into which no hops had been introduced. "Howbeit," says he, "as the beer, well sodden in the brewing, and stale, is clear and well coloured as muscadell or malvesey (malmsey), or rather yellow, as the gold noble, as our pot-knights call it; so our ale, which is not at all, or very little sodden, and without hops, is more thick, fulsome, and of no such continuance, which are three notable things to be considered in that liquor.*

The introduction of hops into the composition of beer is thus noticed by Baker in his *Chronicle*:—

"Turkey, carps, hoppes, piccarel, and beer,
Came into England all in one year."

This proverbial distich has led some writers to conclude that hops were not known until the commencement of the sixteenth century. This plant, however, had been known long before this period; indeed, in many parts of England it grew wild, and its long shoots were used as food like other esculent vegetables. In the reign of Henry VI., A.D. 1428, a petition was forwarded to Parliament against the hop, in which it was described as a "wicked weed," from which circumstance it would appear that it was at that period more or less imported and used in the manufacture of beer. It is certain, moreover, that hops were employed in this country in brewing in the commencement of the fifteenth century. Gilbert Rymer in his *Dietary* pronounces beer brewed from barley, well-hopped (*bene lupulata*), of middling strength, thin and clear, well-fined, well-boiled, and neither too new nor too old, to be a sound and wholesome beverage. The culture, however, of the hop would appear to have been introduced from Belgium and Flanders, in the reign of Henry VIII., or about the year 1524. The first mention of the hop in the English statute-book occurs in 1552. Considerable quantities of it were imported from the low countries so late as the reign of Queen Elizabeth, which leads us to suppose that its culture in this country was at first but limited in its extent. In the reign of James I. hops were extensively cultivated in England. In a work originally published by Walter Blith, A.D. 1649, and called the *English Improver*, or, a *New Survey of Husbandry*, who tritely terms himself "a lover of ingenuity," the following remarks occur in a chapter on hop plantations: "As for hops, it is grown to a national commodity. But it was not many years since the famous city of London petitioned the Parliament of England against two nuisances or offensive commodities that were likely to

* Aetius Tetrab. iii., serm. 11, cap. 29.

† Ruellius, lib. ii., de Nat. Stirp., cap. xix.

‡ Ibid.

* Historical Description of the Island of Britain.

come into great use and esteem, and that was Newcastle coal, in regard of their stench, &c., and hops in regard they would spoyle the taste of drink, and endanger the people, and from some other reasons I do not well remember." The Parliament, according to this writer, "were wiser than they," and the prayer of the petition was, as a matter of course, denied.

Gervase Markham, an earlier writer than Walter Blith, remarks, in relation to the distinction between ale and beer: "The general use is by no means to put any hops into ale, making that the difference betwixt it and beer, that the one hath hops, the other none.*

Andrew Boorde, one of our oldest English medical writers, states, that those who put any other ingredients into ale than malt, barley, and yeast, sophisticate the liquor. "Ale," he continues "is the natural drink of an Englishman, but beer, on the other hand, which is made of malt, hops, and water, is the natural drink of a Dutchman, and of late is much used in England, to the great detriment of many Englishmen."

William Bullein, in his "*Neuwe Booke of Phisicke*," published A. D. 1568, and wherein, according to his own statement on the title-page, "be uttered many notable rules," informs us in what respects ale and beer differed. "Ale," affirms this writer, "doth engender grosse humors in the body, but if it be made of good barley malt, and of holsum water, and very wel sodden, &c., it is very holsum." Again, "*c.eane brued beere*, if it be not very strong, *brued with good hops*, doth cleanse the body from corruption;" and "*it is an usual or common drinke in moste places of England*."

The above passage shows that beer, or hopped malt liquor, was in general use about the middle of the sixteenth century. This quaint writer of "notable rules" further complains, that beer was at that period "hurte and made worse with many rotten hoppes, or hoppes dried like dust, which cometh from beyond the sea." As good hops as could be imported from any place in the world were produced at that period in the fruitful grounds of England, and in many places in Suffolk. Bullein states, "they brue theyr beere (another mode of spelling the word he uses,) wyth the hops that growe uppon theyr owne groundes."

Howell, in his Familiar Letters, corroborates these statements. "*In this island*," he remarks, "the old drink was ale, noble ale; but since beer has hopp'd in amongst us, ale is thought to be much adulterated, and nothing so good as Sir John Old Castle and Smugg the smith was used to drink."

Moryson, in his History of Ireland, thus remarks of the Irish of 1599 to 1603:—"Their food for the common sort is white

meat, &c., and drink, not English beer made from malt and hops, but ale."

These quotations sufficiently determine the ancient distinction between ale and beer.

Dr. Thomson erroneously asserts that "the original difference between these two liquids was owing to the malt from which they were prepared." Ale-malt, which was dried at a very low heat, was of a pale colour; beer, or porter malt, on the other hand, was dried at a higher temperature, and acquired a brown colour; while, at the same time, the incipient charring which took place during this process imparted not only a dark colour, but a peculiar and bitter taste. The same writer distinguishes the ale and beer of the present day as follows: "Ale is light coloured, brisk, and sweetish, or, at least, free from bitter; while beer is dark coloured, bitter and much less brisk." These popular beverages, however, are prepared variously by each manufacturer, and, consequently, differ much in colour and taste.

Porter is a beverage of modern invention. It was first manufactured about the year 1722. Previous to that period, a drink composed of beer, ale, and two-penny was in great demand, in particular among street porters and others engaged in similar occupations. A brewer, however, in London, of the name of Harwood, invented a substitute, which derived its name from those useful members of society. Porter principally differs from ale and beer, in being made from high-dried malt. An immense quantity of this liquor is consumed in London. The metropolis has ever been famous for the production of this popular beverage. The water most suitable for the preparations of malt liquor is thus described by a competent writer: "The Thames water at London is fattened by the washings of hills and the dirt of sewers, which gives it a thick body and a muddy taste, and therefore it fines well, and makes most drink with less malt."

The introduction of hops may in part be ascribed to the desire to preserve ale from speedy acidity or decay. "The wiser hushwines say," remarks a writer recently quoted, "the utter want of hops is the reason why ale lasteth so little a time; but either dieth or soureth, and therefore they will to every barrel of the best ale allow half a pounds of good hops."*

Tusser in his "Five Hundred Pointes of Good Husbandrie," in some directions concerning the culture of a hop-garden, presents his readers with the following epigrammatic point:—

"The hop, for his profit, I thus do exalt,
It strengtheneth drink, and it favoureth malt;
And being well brewed, long kept it will last,
And drawing aside,—if ye draw not too fast."

* Maison Rustique, A. D. 1616.

* Maison Rustique, article "Brewhouse."

Various ingredients were used by our ancestors, and also by the ancients, to render liquors prepared from grain less insipid and more fit to keep. Columella in the following lines alludes to this practice:—

Sectaque præbatur madido sociata lupino
Ut Pelusiaci proritet pocula zythi.

The *lupine* was a bitter herb or plant, and would render the *zythum* of the ancients not unlike the beer of our ancestors. Andreas Bæcius, in reference to the malt liquors of the ancients, remarks, *ac delectabile esse acri punctione addita ex Siseris radicibus, et Lupinis*, that they were accustomed to add to them the root of the Siser and Lupines in order to render them pleasant and sharp.

Our ancestors, like the ancients, had no certain principle as to the grain best suited for brewing. The roll of the household expenses of certain noblemen in the nineteenth century shows that barley, wheat, oats, and sometimes a mixture of each of them, were used to make beer. The beer, thus prepared was insipid, and soon became unfit to be used. It was customary to remove the mawkish flatness of such beer by the addition of spices and other strong ingredients. Long pepper was for this purpose employed some time after the introduction of hops.*

Bitter ingredients, in the form of herbs, were held in much repute by our forefathers. The principal remedies of the herbalists, or *leeches*, the medical practitioners of those days, consisted of the leaves of bitter plants infused in malt liquor, which from thence were termed *herb-ales*. This practice is common to some parts of the country, even in the present day. Herb-ales, among the people, became popular as remedies for most diseases; and, in course of time, a taste was acquired for these nauseous medicaments.

The hop grows only in rich soils, and hence its generic name, *humulus*, from *humus*, which signifies “moist earth.” *Lupulus*, the specific name of this plant, is a contraction from *lupus salictarius*, a designation which Pliny informs us was given to it because it grew among the willows, and, twining round them and choking them up, proved as destructive to those plants as the wolf is to the flock.

It is a singular circumstance that *llewig y blaid*, the ancient British name for the hop, signifies “bane of the wolf,” a title which it derives, perhaps, from its narcotic properties. The popular denomination of this plant, *hop*, owes its origin to the Anglo-Saxon word, *hoppa*, to climb, a title peculiarly applicable to its well-known habits.

The quantity of hops added to the wort varies according to the strength of the beer, the length of time it is to be kept, or the heat of the climate where it is intended to

be exported. To render strong beer highly aromatic and remarkably clear, according to Dr. Ure, directions are given to add four and a half pounds of hops to a quarter of malt. The same writer states that the rule in England, when preparing the stronger kinds of ale or porter, is to use a pound of hops for every bushel of malt, or eight pounds to a quarter. In the preparation, however, of common beer, it is usual not to add more than a quarter of a pound of hops to the bushel of malt.

The hop possesses narcotic properties, and has been used in a medicinal form, with more or less advantage. George III. was directed to rest on a pillow of hops in order to procure sleep. “Hops,” remarks Hooper, “are highly intoxicating.”* The hop-flower exhales a considerable quantity of its narcotic power in drying; hence those who sleep in hop-houses are, with difficulty, roused from their slumbers.†

Dr. Chapman, in his work on Therapeutics, speaks of the hop as “an anodyne which may be substituted for *opium*, where the latter, from idiosyncrasy, or other causes, does not suit the case.”

On reference to the medical dispensatory, it will be seen, that the hop, when prescribed for medicinal purposes, is recommended to be taken in the form of powder, in doses of from three to twenty grains. Morrice (see his Treatise on Brewing) states, that the average quantity of hops employed in the manufacture of beer or ale is an ounce to a gallon of beer, or two pounds to the barrel. According to this calculation, the individual who drinks two quarts or eight glasses of malt liquor, per diem, swallows not less than half an ounce of hops, in addition, of course, to a greater or less quantity of alcohol, which would necessarily be present. In defence of this practice, the following respectable authority has been advanced: “The narcotic power does not exist, in a very great degree; but as it is united to a bitter extract which is grateful to the stomach, it is occasionally found useful for medicinal purposes, where opium is objectionable on account of its injurious effects on the digestive organs. The narcotic property appears to reside in a *resinous aromatic* principle of a volatile nature, so that in the usual method in which *hops* are employed in *brewing*, it is probably dissipated, and nothing remains but the bitterness.” The existence of a bitter principle in malt liquors, combined with a certain proportion of alcohol, certainly is not sufficient to account for the rapid stupor which *hopped malt liquors* produce on the functions of the human system. The remarks and experience of Professor Mussey, of America, contribute much to elucidate this interesting subject. “In addition,” he observes, “to alcohol,

* Manners and Household Expenses, &c., London, 1841.

* Hooper's Medical Dictionary, Art. Hops.

† Edinb. Encyclop. vol. xii., p. 423.

which is universally acknowledged to be a poison, beer contains a narcotic principle derived from the hop, which can never be habitually taken, even in a small quantity, without injury. All narcotic substances, of every name and nature, are known to be poisons. The impressions they make upon the healthy actions of life are always unnatural and uncongenial; and no familiarity produced by habitual use can make them harmless and healthful like bland and nutrient articles of diet. They disturb the equilibrium of action in the living organs, and bring on premature decay by the needless waste of the principle of life. At the age of twenty years, while occupied during the hay season, upon my father's farm, I drank hop beer for about three weeks, but was induced to discontinue it on account of a peculiar organic weakness, as well as a diminution of the general strength, which I attributed to that beverage. The local disorder immediately subsided, and, in about two weeks from the time of ceasing to drink the beer, my strength was restored. The beer was made from a pound of hops, a gallon of molasses, and a barrel of water, with a little yeast to ferment it. This kind of beer was at that time much in vogue among the farmers in the neighbourhood, but it soon fell into disuse as a drink not the most wholesome.*

The habitual use of hops ought, however, to be deprecated, not only for the narcotic influence they possess, but for the injurious effects of bitters on the human system, when long continued. The use of bitters in some persons augments the appetite, and thus causes an undue proportion of food to be taken into the system. An unnecessary amount of chyle may be thus eliminated, and a plethoric condition of the blood-vessels induced. All medical writers agree that bitters, when habitually used, impair the functions of digestion. As "appetite and disgestion," remarks Dr. A. T. Thomson, "are promoted by the operation of tonics on the stomach itself, it may appear singular that their frequent and long-continued use is generally followed by a loss of tone; but such is really the case."†

Dr. Thomson is not alone in this opinion. Dr. Thackray, in reference to domestic medicines, remarks, that "bitters, though they sometimes improve the appetite for a time, tend, when long continued, to weaken digestion. They ought not to be taken without medical direction.‡ The views of Dr. Trotter accord with those just expressed. "Bitters of all kinds seem to possess a narcotic power, and, when used for a considerable length of time, destroy the sensibility of the stomach. This is a class of medicines that requires much caution in the treat-

ment of dyspeptic complaints, or what are called weak digestion. Some people are very fond of *herb-ale* and *diet* drinks, the ingredients of which are bitter herbs and roots, and are equally pernicious when long continued or frequently resorted to."*

Dr. Darwin remarks, that "a continued use of bitter medicines is supposed to induce apoplexy or other fatal diseases. Hence it would appear that the daily use of hops in our malt liquor must add to the noxious quality of the spirit in it; and when taken to excess must contribute to the production of the same disorders."†

Dr. Falk makes a similar observation on the admixture of hops with malt liquors, a practice which he deems hazardous and detrimental.‡

Howell, who dates his letter, A. D. 1634, enumerates those nations where beer was used at that period. In the *Seventeen Provinces*, all *Low Germany*, *Westphalia*, all the lower circuit of *Saxon*, *Denmark*, *Sweden*, and *Norway*, beer was "the common natural drink, and nothing else." The Prussians had "a beer as thick as honey." In the "Duke of Sax's Country," the beer was as yellow as gold, made of wheat and inebriated as quickly as sack. Beer blended with spice was made in some parts of Germany. It would keep for many years, so that at some weddings a butt of beer would be drunk as old as the bride. The same writer also mentions Poland as a beer country.§

It would be impossible, in the brief limits of an essay like the present to enumerate the varieties of inebriating liquors in use, both in ancient and modern times. A brief summary must, therefore, suffice, with regard to those which have not yet received consideration. Most of these liquors are prepared by fermenting different substances peculiar to the climate in which they are produced. Not a few, however, have been introduced by intercourse with European and other civilized nations.

Mead appears to have been the common beverage of the primitive inhabitants of this country. It consisted simply of honey and water reduced to a state of fermentation. Among the ancient Irish it was termed *miodh*, and *mil-fion*; that is, "honey-wine."|| This appears in the Life of St. Berach, who flourished in the seventh century, and also in the Annals of Ulster, under the year 1107. Mead was held in much esteem by the ancient Britons. In the court of the ancient Princes of Wales, the mead-maker was held as the eleventh person in point of dignity. By an ancient law of the Principality, three things in the court were ordered to be communicated to the King, before they were

* American Temperance Intelligencer, 1835.

† Professor Thomson, *Materia Medica*.

‡ Thackray on Digestion and Diet, p. 145.

* Trotter on Drunkenness, p. 113.

† Zoonomia, vol. ii., p. 735.

‡ Guardian of Health, p. 147.

§ Familiar Letters, letter iv.

Harris's Ware, ii., 153.

made known to any other person : 1st, Every sentence of the judge; 2nd, Every new song; and 3rd, Every new cask of mead. The solace which this or some similar liquor afforded is termed by Ossian "the joy of the shell."

Howell enumerates, besides ale and beer, *metheglin*, *braggot*, and *mead*, among the natural drinks of our ancestors. These, he remarks, differed in strength according to the three degrees of comparison. "The first of the three," remarks this writer, "which is strong in the superlative, if taken immoderately, doth stupify more than any other, and keeps a *humming* in the brain, which made one say, that he loved not *metheglin*, because he was used to speak too much of the *house* he came from, meaning the hive."* This writer mentions Russia, Muscovy, and Tartary, as nations in which mead was used; which, he adds, "is the naturallest drink of the country."

Howell, in the same letter, mentions cyder and perry among the natural drinks of our forefathers. *Cyder* is a beverage in common in some parts of this country at the present day. The counties of Hereford and Devon, as well as the Norman isles of Jersey and Guernsey, are famous for the production as well as consumption of cider. It is a liquor of considerable antiquity. The Normans obtained a knowledge of it from Biscay, into which country it is supposed to have been introduced by the Carthaginians.† Pliny speaks of wine made from apples. St. Augustin states, that the Manichæans drank a delicious liquor made from the juice of the same fruit. Tertullian also speaks of a liquor pressed from apples, which he describes as very vinous or strong. His words are *succum ex pomis vinosissimum*. Petrarch includes ale and cyder as the most common drinks of the English in his time.‡

Perry also is an ancient beverage. Among the Latins, it was named *pyratia*, *pyrarium*, as cyder, in like manner, was termed *pomata* or *pomatium*. Jerome, Fortunatus, and other writers, refer to this liquor as a drink in common use. The *οἶνος ἀπ' ἄπλης* of Dioscorides, according to Turnebus, is perry, or pear wine.§

Northern nations, from a remote period, obtained an inebriating liquor from the juice of the apples or berries of the service tree. Virgil thus describes this custom:—

Ipsi in defossis specubus secura sub alta
Otia agunt terra, congestaque robora, totasque
Advolvere focus ulmos, ignique dedere
Hic noctem ludo ducunt, et pocula læti
Fermento atque acidis imitantur vitea sorbis.

Georgics, v., 367.

To subterraneous caves the natives fly,
To avoid the winter's keen severity;

There many a pile of flaming oak they raise;
Heap on whole elms at once, and bid them blaze;
No toil they know, their nights with sports are
While jovial goblets circle gaily round, [crow'd,
For not unskillful are they to produce
A mimic wine from servis' harshes't juice.

The natives of those countries which lie between the arctic circle, such as Greenland, Norway, and Lapland, use for the same purpose the berries of the juniper tree. They also extract a brandy from the same liquor, which has a similar effect to that distilled from the grape.*

The Egyptians, in the present day, prepare a fermented liquor from barley, maize, millet, and rice. The Nubians make free use of an intoxicating liquor called *bouza*, which is prepared from *dhourra*, or barley.† The Abyssinians inebriate themselves with beer and mead. Honey, from which the latter liquor is prepared, is found in great abundance in Africa. The Caffres and Tambookies prepare an intoxicating compound by the fermentation of millet or Guinea corn. In the language of that country it is denominated *pombie*. The Congoese and natives of Ashantee, with various other nations in the warm climates of the torrid zone, ferment the juice of the palm tree.‡ The natives of Siberia and Kamschatka prepare a liquor from a species of *mushroom*, which, by fermentation, becomes so powerful, that writers assert that the urine of individuals who become intoxicated by it, possesses an inebriating quality.§ The Kamschatkans have a curious method of preparing a liquor by means of a grass, which they call *slatkaia-trava*. This grass, after it has undergone some preliminary process, is steeped in water of a sufficient temperature until fermentation takes place, when a liquor called *raka* is afterwards distilled from it. It is most pernicious in its effects on the health, and produces sudden nervous disorders.

The natives of Otaheite and the Sandwich Islands obtain a strong spirit from the root of the *tee*, a plant which grows in great plenty in their mountains, and in some respects resembles the beet-root of our own land. It is, of course, first mixed with water, and afterwards undergoes fermentation. A common beverage among this people is made from a root which they call *ava-ava*, and which is fermented by means of the saliva, being first well masticated by individuals appointed for the purpose.||

The natives of Horn Island prepared a similar liquor so early as 1616, and probably from a more remote period.¶ It was made from a herb called *cana*.

* Travels through the most Northern Parts of Europe, &c.

† Burckhardt's Travels in Nubia, 4to., 1819.

‡ Voyage to Congo, pt. i., p. 564, apud Churchill. Bowdich's Ashantee, p. 386.

§ History of Kamschatka.

|| Cook's Last Voyage, vol. i., p. 186.

¶ Schouter's and Le Maire's Voyage round the World, anno 1616.

* Familiar Letters, letter lv., 1634.

† Nat. Hist., lib. xiv., cap. 16.

‡ Opera Petrarci, tom. iii., p. 3.

§ Dioscorides, lib. v., cap. 21. Palladius, lib. iii., cap. 25.

The native Indians of America adopt similar methods. One of these barbarous tribes make a powerful liquor of certain roots, putrefied and infused in water. Others extract an inebriating liquor, called *chica*, from maize, or from the manioc root: the latter is, in the first instance, chewed by the women. The saliva excites a vigorous fermentation, and a liquor is produced of which these people are devotedly fond.*

In the Chinese empire much ingenuity is displayed in the production of intoxicating liquors. The natives of the province *Quang Tong*, in particular, distil a liquor from the flowers of a variety of the lemon-tree, which are said to possess a strong saccharine property.† The inhabitants of the celestial empire, however, carry their powers of invention to a still greater extent; even the flesh of sheep is subjected to fermentation; the liquor is then submitted to the still. The spirit thus extracted is said to be very strong.‡ *Lamb-wine*, or, as the natives call it, *Kaw-yang-tsyew*, has long been a favourite beverage among the Tartars.

The inhabitants of Tartary are enabled to procure inebriating liquors by a variety of means. *Koumiss*, their principal beverage, is prepared by fermenting mare's milk. The Affghans manufacture a similar drink from the fermented milk of sheep.§ In Iceland a liquor of the same kind is made by the fermentation of whey.||

The inhabitants of China and the contiguous islands commonly prepare a liquor from rice, which may be denominated rice-wine. The natives of Japan, who excel in this art, prepare a strong liquor in large quantities from this nutritious grain, which they term *sacki*.¶ Rice-wine is also used by the inhabitants of Formosa.** The natives of several of those islands which lie contiguous to Japan and Formosa, obtain an inebriating liquor by fermenting corn, rice, pulse, and other kinds of grain or fruit, which they denominate *awamuri*.††

The Swedes, whose propensity for strong drink is well known, flavour their brandy by distilling over with it a large species of the *black ant*. These insects contain a resin, an oil, and an acid, which are highly valued for the flavour and potency which they impart to the brandy. They are found in abundance at the bottom of the fir-trees, in small round hills, and are taken in that state for use.‡‡

Numerous other ingenious methods are used in all parts of the globe to produce inebriating liquors. Almost every species of tree and every variety of grain and fruit is employed for this destructive purpose. The limits of this essay will not allow of further extension.

III. *The history of distilled liquors.*—The discovery of distillation forms a remarkable and important epoch in the history of intoxicating liquors. This fatal invention placed within the reach of man a readier, more speedy, and more effectual means of sensual gratification.

The date and authors of this invention are circumstances involved in considerable obscurity. The Chinese, whose perseverance in scientific pursuits is well known, are, by some writers, supposed to have been acquainted at an early period with the art of distillation. This supposition, however, is destitute of the necessary proofs.

The Chinese and Saracens had long been acquainted with a species of distillation, by means of which they were enabled to extract the essence, or *aroma*, of flowers. Perfumes and essences were held in great esteem among these oriental nations.

Pliny, who flourished in the first century of the Christian era, does not make the slightest allusion to the art of distillation. Galen, also, is silent on this subject. This celebrated physician flourished about a century after Pliny. He alludes only to distillation as a means of extracting the aroma of plants and flowers.

The same observations apply to the Arabians, who were famed for their pretended knowledge of alchemy, and the profession of medicine. Rhazes, Albucassis, and Avicenna, three celebrated physicians, who lived about the tenth and eleventh centuries, allude to the distillation of roses, but are silent with regard to any process by which an intoxicating spirit could be extracted from fermented liquors.

Arnoldus de Villa, or Villanova, a physician of some eminence, and professor of medicine at Montpellier, who flourished in the thirteenth century, is the first writer who distinctly alludes to the discovery of ardent spirit. It appears that the ancients were not acquainted with the process, that it had only become recently known, and that when discovered it was believed to be the universal *panacea* which had so long been the object of philosophical investigation.

Raymond Lully, a native of Majorca, and a disciple of Villanova, dwells in the most enthusiastic terms on the properties of this newly-discovered medicine. This philosopher was born A. D. 1236, and died in 1315. Lully believed it to be an emanation of divinity, sent for the physical renovation of mankind. He was, in consequence of this notion, induced to believe that the end of the world was not far distant. This writer

* Acosta, Hist. Nat. des Indes, fol. 162; Dampier's Voyages; Wafer's Voyages, &c.

† Du Halde, vol. i., p. 109.

‡ Grosier, vol. ii., 319; Du Halde, vol. i., p. 303.

§ Elphinstone's Account of Caubul, &c., 4to, p. 236.

|| Mackenzie's Iceland, 4to, pp. 156-277.

¶ Kamfer, vol. i., p. 121; Titsingh's Account of Japan.

** Candidius's Account of the Island of Formosa, apud Churchill, vol. i., p. 405.

†† Mod. Univ. Hist., vol. vii., p. 993.

‡‡ Consett's Remarks in a Tour through Sweden.

first applied to it the name of *alcohol*. For a considerable length of time the discovery of this potent fluid was kept a profound secret, and it was not generally made known until the lapse of many years. Such is an illustration of the effects produced on the minds of those who were first acquainted with this important event. Through the influence of Villanova and Lully this medicine gradually extended its influence northward, and through the other divisions of Europe.

The first product of the still, of which we have record in Europe, was manufactured from the grape, and sold in Italy and Spain *as a medicine*. The Genoese were the first to prepare alcohol from grain. In the thirteenth century they sold it in small bottles at a high price, under the name of *aqua vitæ* or *water of life*. It still retains this name among the common people in France, in which country distillation was first made known in 1313.

In the fourteenth century medicated spirits were in much request in Hungary. A queen of that country acquired considerable fame by the invention of a medicine composed of *aqua vitæ* and rosemary, which was supposed to possess extraordinary medicinal properties. The recipe for making this far-famed remedy, as copied from her breviary by Prevôt, is as follows: Three parts of *aqua vitæ*, four times distilled, and two parts of the tops and flowers of rosemary, were put into a close vessel, and there allowed to remain in a gentle heat for fifty hours, and afterwards distilled. One dram of this mixture was to be taken in the morning, once only every week, either in food or drink, and the face and diseased parts were to be washed with it every morning. The recipe further states, that it renovates the strength, purifies the marrow and nerves, restores and preserves the sight, and prolongs life.

Charles the Bad, King of Bavaria, lost his life in the most miserable manner, through the prevalent notion that the external application of spirits was a restorative of strength. This monarch was wrapped in sheets steeped in *eau de vie*, with the view to infuse new vigour into a frame debilitated by debauch and excess. His attendant, by accident, set fire to them, and after the third day the unfortunate monarch died in the most dreadful tortures.

These notions, which became prevalent throughout the German states, made the distillation of *aqua vitæ* an object of considerable importance. Numbers of nobles erected stills in order to distil waters of various kinds for the benefit of their families and the poor. A princess of Brunswick, for example, consort of Philip II. Duke of Grubenhagen, in 1560 erected a still and laboratory of this kind at her palace, Grubenhagen, Lower Saxony.*

In the 16th century, alcohol became more generally known. As a medicine it was highly extolled, and several treatises were written in commendation of its virtues. In one of these issued by Michael Savonarole, an edition of which was published about a century after his death, it is stated that at that period the *spirit of wine* was used *as a medicine only*, and was known under the name of *aqua vitæ*, or water of life, from its supposed power to prolong life. This writer, in the following characteristic quotation, alludes with some degree of enthusiasm to the personal benefit he himself had derived from a trial of his favourite *panacea*: “Est et aqua vitæ dicta, quoniam in vitæ prorogationem quàm maximè conferre sentiat. Sum etenim memor ejus verbi quod sæpe hilari corde gravissimus ille vir et in orbe sua ætate clarissimus medicus, Antonius Delascarparia, exclamando pronuntiabat, qui, dum octogesimum annum duceret, dictabat: *O aqua vitæ! per te jam mihi vita annos duo et viginti prorogata fuit.*”

In Hollinshed's Chronicles, allusion is made to a treatise written by an individual named Theoricus, who thus highly extols the sanative properties of alcohol: “It sloweth age, it strengtheneth youth, it helpeth digestion, it cutteth phlegme, it abandoneth melancholie, it relisheth the heart, it lighteneth the mind, it quickeneth the spirits, it cureth the hydropsia, it healeth the strangurie, it pounces the stone, it expelleth gravel, it puffeth away ventositie; it keepeth and preserveth the head from whirling, the eyes from dazzling, the tongue from lisping, the mouth from snaffling, the teeth from chattering, and the throat from rattling; it keepeth the weasan from stiffling, the stomach from wambling, and the heart from swelling; it keepeth the hands from shivering, the sinews from shrinking, the veins from crumbling, the bones from aching, and the marrow from soaking.”

Ulstadius, another writer of those days, adduces this most singular proof of its excellence: “It will *burn*, being kindled.”

Up to this period it is probable that alcohol was considered only as a medicinal agent. It was too potent, however, and too pleasurable in its effects to remain long in so confined a sphere. Mankind gradually introduced it into use as an article of diet, and many individuals even laboured under the delusion that it was necessary to their existence.

Distillation, according to M. le Normand, was not conducted on a large scale until about the end of the seventeenth century. Its manufacture, even at that period, was unimportant when compared with the product of the still about the commencement of the eighteenth century.

Distillation is generally supposed to have been introduced into England during the

* Beckman's Hist. Invent., vol. iii., p. 148.

reign of Henry II. Spirit was distilled from corn, in Ireland, at an early period. In the common language of the country, this liquor was called *uisque beatha*, or *usquebah*, and also *bulcaan*. The latter term strongly expresses the fiery nature of the spirit, being derived from the words *buile*, madness, and *ceann*, the head. The term *whiskey* is derived from the word *usque*.

The consumption of corn in the production of whiskey, alarmed, at an early period, the Irish government, by whom it was viewed as a deplorable waste of nutritious food. An act passed in the reign of Philip and Mary, is thus headed: "To prevent the making of aqua vitæ."* The preamble of this act states as follows:—"Forasmuch as aqua vitæ, a drink nothing profitable to be daily drunken and used, is now universally throughout this realm of Ireland made, and especially in the borders of the Irishy, and for the furniture of Irishmen, and thereby much corn, grain, and other things, is consumed spent, and wasted, to the great hindrance, cost, and damage of the poor inhabitants of this realm," &c.; it hereby enacts, that none, save peers, gentlemen of £10 freehold, and freemen, (for their private use,) shall make aqua vitæ without the deputies' license.

In 1584, Sir John Perrot, then Lord Deputy of Ireland, during his visit to the town of Galway, in his address to the mayor and corporation, among other "articles touching reformacions in the common wealthe," adverts in strong terms to the evil of intemperance which had then begun to spread: "That a more straighter order be taken to bar the making of aqua vitæ of corne than hitherto hath bene used, for that the same is a consumation of all the provition of corne in the common wealthe;" and, "That the aqua vitæ that is sould in towne ought rather to be called aqua mortis, to poyson the people than comfort them in any good sorte, and in like manner all their byere, and all wherein the officers, in reformynge the same, have nede to be mor vigilant and inquisitive than they be."†

The testimony of Moryson, (including the period between 1599 and 1603,) may be adduced in evidence of the common use of aqua vitæ by the Irish, and the evils which thereby resulted. "At Dublin, and in some other cities, (in Ireland,) they have taverns wherein Spanish and French wines are sold; but more commonly the merchants sell them by pints and quarts in their own cellars. The Irish aqua vitæ, vulgarly called usquebaugh, is held the best in the world of that kind, which is made also in England, but nothing so good as that which is brought out of Ire-

land. And the usquebaugh is preferred before our aqua vitæ, because the mingling of raisins, fennel seed, and other things, mitigating the heat, and making the taste pleasant, makes it less inflame, and yet refresh, the weak stomach with moderate heat and good relish. These drinks the English-Irish drink largely, and in many families (especially at feasts) both men and women use excess therein: but when they come to any market town to sell a car or horse, they never return home until they have drank the price in Spanish wine, (which they call the King of Spain's daughter,) or in Irish usquebaugh, and until they have outslept two or three days' drunkenness."*

Howell, in reference to the same subject, observes: "In Ireland they are more given to milk and strong waters of all colours; the prime is *usquebaugh*, which cannot be made anywhere in that perfection; and whereas we drink it here in *aqua vitæ* measures, it goes down there by beer glass-fulls, being more natural to the nation."†. Campion relates, that in his time the natives of Ireland would "in haste squeeze out the blood of raw flesh, and ask no more dressing thereto, the rest boileth in their stomachs with *aqua vitæ*, which they swill, after such a surfeit, by *quarts* and *pottles*."‡

Sir James Ware is of opinion that ardent spirits were distilled in Ireland at an earlier period than in England. "The English aqua vitæ," he observes, "is thought to be the invention of modern times. Yet we find," he further remarks, "the virtues of usquebaugh, and a receipt for making it, both simple and compound, in the red book of Ossory, compiled nearly 200 years ago; and another receipt for making a liquor called *nectar*, made up of a mixture of honey and wine, to which are added ginger, pepper, cinnamon, and other ingredients." Ledwich states, that, for a considerable period, *aqua vitæ* was employed only as a medicine. It was, he also affirms, eagerly sought after, and believed by physicians to dissipate humours, strengthen the heart, cure the colic, dropsy, palsy, quartan fever, stone, as well as to preserve health and to prolong life.

The Act of Philip and Mary, previously adverted to, contributed in a great degree to prevent the common use of whiskey as a beverage in Ireland. Mead and ale appear to have been the usual drink of the natives of that country. In regard to the use of ardent spirits, historians of the time are almost altogether silent. Sir William Petty (1672), in reference to the drinks of the operative classes, frequently alludes to beer, and assigns causes for the great use of ale, and the excessive number of public-houses, but makes no mention of ardent spirits.§ Law-

* 3rd and 4th Philip and Mary, cap. vii.

† Hardiman's History of Galway.

* Moryson's Hist. of Ireland.

† Familiar Letters, letter lv., 1651.

‡ Campion's Hist. of Ireland, p. 13, 1809.

§ Political Anatomy, pp. 117 and 121.

rence, also, has no reference to the same subject, although he particularly states the loss of grain, which arose from the too general use of ale.*

About the close of the seventeenth and commencement of the eighteenth century, distillation in Ireland was conducted on a large scale. An imprudent and short-sighted Act of legislation gave great encouragement to this destructive art. Corn had been little cultivated in Ireland, and a slight failure of the harvest entailed on the country great scarcity of this necessary of life. In the earlier part of the eighteenth century, the Irish legislature directed their attention to the best means of increasing its growth.—Acts for the encouragement of tillage were passed, and bounties were granted in furtherance of the same object. The manufacture of spirits became a popular measure, not only as a means of increasing the growth of corn, but as an efficient and powerful method of augmenting the revenue. Men of enlarged views and philanthropic minds witnessed the encouragement thus given, with well-founded apprehension. “In order to promote tillage,” remarks one judicious writer of that period, “several gentlemen have of late encouraged the distillation of whiskey; but it may be doubted whether the use of this liquor, by the common people, may not in time contribute to the ruin of tillage, by proving a slow poison to the drinkers of it.”† Unfortunately for the interests of Ireland, these fears were realised at an early period. The revenue in 1719, produced not more than £.5785. The consumption of foreign and home-made spirits, in the year 1729, was 439,150 gallons. In 1795, the consumption amounted to 4,505,447 gallons. This increase, remarks an accurate writer, could not have arisen from an increase of population. In the interval alluded to, the population of Ireland had only doubled. In 1731, the inhabitants of Ireland were estimated at 2,010,221. In 1792, at 4,088,226. Nor was the enlarged consumption attributable to increase of wealth. Other articles of luxury do not appear to have increased in any similar proportion.‡

The rapidly increased consumption of ardent spirit in England and Scotland, in conjunction with its direful effects on individual and national welfare, has been elsewhere referred to. An eminent physician well observes, that the art of extracting alcoholic liquors by distillation must be regarded as the greatest curse ever inflicted on human nature.§

The preceding observations include a description of a large proportion of intoxicat-

ing drinks, known and used by the natives of those countries who have enjoyed the advantages of civilization and refinement, as well as those tribes whose inventive faculties have been stimulated by the desire to gratify the pleasures of sensual enjoyment. The juice of almost every tree—the vast varieties of fruits which a kind Providence has bestowed upon man for his lawful enjoyment—grain and herbs of every description—have been employed for this end. Even some of the forms of animal creation have been perverted for a similar purpose. No subject, indeed, displays a more lamentable view of human nature; while, on the other hand, it presents a subject of profitable reflection and warning for the guidance of future generations.

SECTION II.

NATURE AND COMBINATIONS OF ALCOHOL.

Under the names of rum, brandy, gin, whiskey, usquebaugh, wine, cider, beer, and porter, alcohol is become the bane of the Christian world.—DR. DARWIN.

Throughout the wide-spread kingdom of animal and vegetable nature, not a particle of alcohol, in any form or combination whatever, has been found, as the effect of a single living process; but it arises out of the decay, the dissolution, and the wreck of organized matter.—DR. MUSSEY.

Sugar is the indispensable material out of which alcohol is formed; and it is melancholy to reflect on the misapplication of art in converting one of the most pleasant, harmless, and nourishing substances in nature, into a bewitching poison.—DR. DRAKE.

I. Alcohol, the origin of its name and chemical properties.—II. The nature and effects of fermentation.—III. The combinations of alcohol.—IV. The comparative strength of intoxicating liquors.—V. The comparative effects of alcoholic drinks on the human frame.—VI. Is alcohol “a good creature of God?”—VII. Alcohol not ready formed in fermented liquors.

I. *Alcohol, the origin of its name and chemical properties.*—Alcohol received its name from an Arabian physician, by whom it was first discovered. The phrase is said to be derived from the Arabic words *al*, the, and *kahol*, a fine impalpable powder. With this substance the ladies of Barbary were accustomed to tinge their hair and edges of their eyelids. Dr. Shaw remarks, that none of the women of Barbary think themselves completely dressed until they have tinged their hair, as well as the edges of their eyelids, with *al-ka-hol*, the powder of lead ore.* In course of time, however, this word appears to have been used to express the separation of any subtile or powerful

* Interest of Ireland in its Trade and Wealth stated. London, 1682.

† Ancient and Present State of Waterford, by Charles Smyth, M.D., 1746, p. 282.

‡ An Inquiry into the Influence of Spirituous Liquors, p. 25. Dublin, 1830.

§ Paris's Pharmacologia.

* Travels through Barbary, p. 294.

substance from the grosser materials with which it was connected. Hence, perhaps, its application to the refined and potent stimulus extracted from fermented liquors.

The name of alcohol, in the present day, is exclusively applied to the spirit or intoxicating principle contained in all fermented drinks. Alcohol was formerly supposed to be the *generical product* of distillation. It is now ascertained that the distillation is but a mechanical agency which separates the alcohol unchanged from those fermented liquors, where it had been previously formed.

Alcohol, in its pure state, is light and colourless, and of the specific gravity, 0.796 at 60° Fahrenheit. It has a powerful odour when submitted to the smell, and is highly pungent and irritating to the taste. Alcohol is exceedingly inflammable, and instantaneously burns when in contact with ignited matter. The flame has a peculiar bluish appearance in the dark, the degree of which depends on the purity of the spirit which is ignited. This powerful fluid acts on dead animal matter as an *astringent* and *antiseptic*, lessening the bulk of the substance to which it is applied, and preserving it from speedy decomposition.

Alcohol is essentially composed of three elementary principles, carbon, hydrogen, and oxygen. The following are the proportions of one hundred parts of *pure* alcohol, according to the calculations of Saussure, the eminent French chemist:—

Carbon	-	-	51.98 or 52.17
Hydrogen	.	-	13.70 — 13.04
Oxygen	-	-	34.42 — 34.79
		—	—
		100	100

The alcohol used in medicinal preparations, by direction of the London Pharmacopœia, is of specific gravity, .815, and contains 93 parts of pure or anhydrous alcohol, and seven parts of water. The rectified spirit of the chemist, sp. gr. 835, contains 15 per cent. of water.

II. *The nature and effects of fermentation.*—The nature and results of fermentation form an interesting and important subject for philosophical investigation.

1. *The nature of fermentation.*—Fermentation is now known to be one of the first results of the partial decomposition of vegetable matter. The several stages of fermentation through which decomposition passes, previous to its completion, are denominated the *vinous*, the *acetous*, and the *putrefactive*. Each stage is subject to certain laws, which would go on to completion, were it not for the obstructing hand of man. Alcohol is the product of the first stage of decomposition, which is from thence termed the *vinous*. Vinous compounds, when subject to a certain temperature, or exposed to the atmosphere, and unmixed with artificial and counteracting

compounds, gradually run into the acetous or second stage of decay, a condition which is subsequently followed by putrefaction.

In course of time, man, by the exercise of his ingenuity, found that he could arrest the progress of vegetable decomposition at those periods which best suited his purposes. By this means he had placed at his disposal vinegar, which is applied to many useful purposes, and fermented liquors, by which he might indulge and gratify unnatural and injurious appetites.

The vinous or first stage of decomposition, like every other operation of nature, is subject to necessary and invariable laws.

2. *Conditions necessary to fermentation.*—*The presence of a sufficient quantity of water.*—To produce fermentation, the materials must be in a liquid state. A mixture of sugar and water will not properly ferment in a state of syrup, but when reduced to a liquid condition it becomes susceptible of fermentation. The ancients were acquainted with this fact, and by inspissating or boiling down the juice of fruits, they prevented it from running into a state of fermentation.

A proper temperature.—The regulation of the temperature forms an important item in the preparation of intoxicating liquors. In hot countries, the atmospheric heat is in general sufficient to carry on the process of fermentation. Vinous fermentation will not take place at a temperature of 32°. It is languid at 50°, but rapid at 60°. The latter temperature, therefore, is required to produce the necessary fermentation for the production of alcohol. Great care is required to prevent the acetous stage, which commences at 70°.

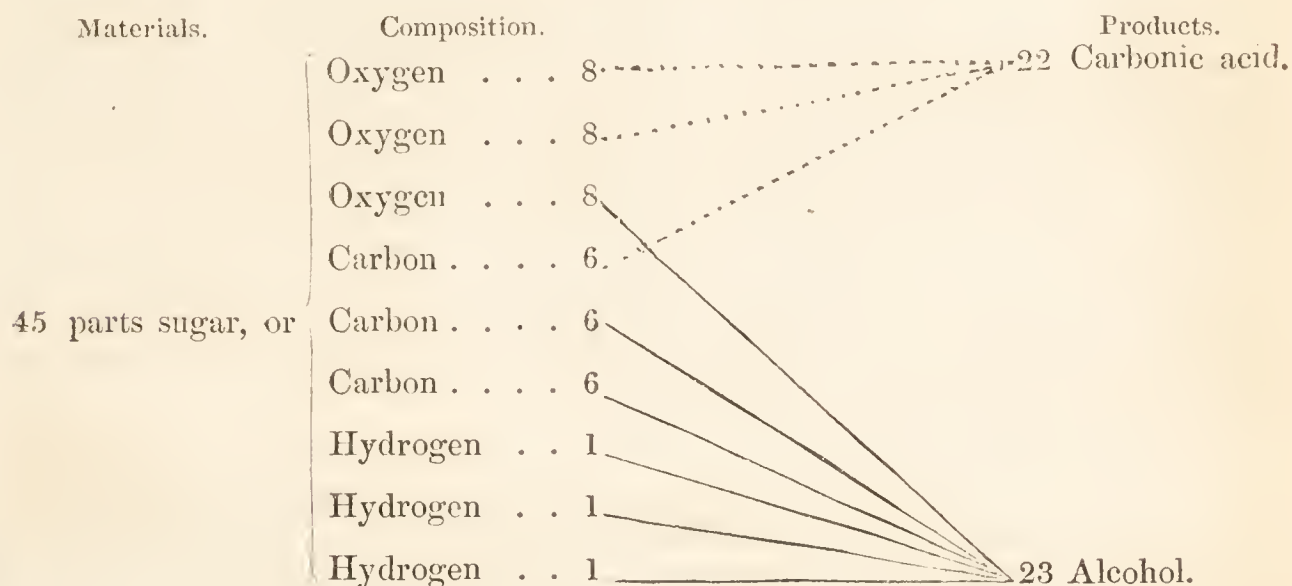
The presence of a ferment in addition to fermentable matter.—The grape contains all the requisites for fermentation, viz., water, ferment, and fermentable water. The ferment is analogous to the *gluten* of plants. Fermentation, however, cannot take place until the fruit is dispossessed of its vitality. The whole of its substance, indeed, must be blended. This circumstance is accounted for by the fact, that the ferment and the fermentable matter are placed in different divisions of fruit. The saccharine portion of must or grape juice resides in the *cells* of the grapes; the *fermenting* principle lodges on the membranes which separate the cells. The wine-press, however, amalgamates the whole. Yeast is employed as a ferment in the preparation of malt liquors. Vegetables, which contain a large amount of saccharine matter, are most capable of fermentation. In the grape, and in similar fruits, the elements are already formed. In malt liquors, however, saccharine matter is developed from the starch of the grain in sufficient quantity by the process of malting.

The presence of an acid in the juices of fruits peculiar to each.—All the juices of fruits which undergo the vinous fermentation contain an acid. The apple contains

malic acid, the lemon *citric* acid, the grape *tartaric* and *malic* acid. Must will not undergo fermentation if the tartaric acid which it contains is entirely removed. Tartaric acid and sugar are sometimes added to wines to increase their strength. Those grapes which contain the most sugar possess the least amount of tartar. The addition of tartar and gluten to very saccharine must, produces an enlarged quantity of alcohol.

3. *Changes effected by fermentation.*—

These changes principally depend on a separation of the elements of the saccharine matter, and the recombination of these elements in the form of a new compound. Every forty-five parts, or three equivalents of sugar, will, by their decomposition in the process of fermentation, yield one equivalent, or twenty-three parts of alcohol, and one equivalent, or twenty-two parts of carbonic acid. The annexed diagram illustrates this decomposition:—



The whole of the hydrogen entering into the composition of the sugar, two parts of the carbon, and one part of the oxygen, unite and form alcohol; whilst the remaining one part of carbon, and two parts of oxygen, unite and form the well-known heavy gas of the brewer's vat—carbonic acid. Some portion of this carbonic acid remains combined with the fermented liquor, communicating to it a sparkling appearance.

In order to obtain alcohol in an absolute condition, it is necessary to subject it to some mechanical agency—as distillation. By this process it is separated from foreign matters of various kinds, such as water, colouring matter, and vegetable extractive.

III. *The combinations of alcohol.*—*Combinations of wine.*—Wines vary very much in the *strength*, *taste*, and *colour*. These conditions depend on climate, soil, and other circumstances of like nature. Wine-making depends greatly on artificial aid, and is not altogether the *natural* process which it is generally supposed to be. Wine prepared in a *natural* manner, without the adventitious aid of the wine-maker's experience, would not be relished by modern society. Imperfect fermentation, indeed, would be the result. Some wines would contain too small a quantity of saccharine matter; others too much of the tartar or acid principle. In some grapes, moreover, there is a deficiency of sugar. This is frequently remedied by boiling the juice, and evaporating the superfluous water; and at other times, either by the

addition of a sufficient quantity of extraneous sugar, or by cutting the stem while growing upon the tree, so as to deprive the grapes of their usual supply of watery particles. Donovan affirms, "that it is indispensably necessary to enrich the juice of some grapes, by methods like these, otherwise they will rapidly run into a hasty feeble fermentation, which would again pass quickly into the acetous stage." "The result," he further remarks, "would be a poor, spiritless, acidulous wine." Thus, also, in regard to the temperature, and other conditions of the utmost importance in the manufacture of wine. The wine-maker is ever on the alert, interrupting the operations of nature, and rendering such assistance as will supply wine in accordance with the acquired appetites of mankind.

In order to improve their flavour and strength, all wines have to undergo a series of artificial operations. These are respectively termed *racking*, *sulphuring* and *fining*.

The following are the principal component parts of grapes, viz., a considerable quantity of *soluble saccharine matter*, a small quantity of *mucilage*, some *tannin*, a portion of the *bitartrate of potass*; and *lime*, and sometimes *sulphate of lime*, in addition to an *azotized vegetable extractive*. The theory of the fermentation of the grape does not differ from that already given in a previous table.

All wines contain, 1, *an acid*; 2, *alcohol*; 3, *extractive matter*; 4, *volatile oil*; 5, *colouring matter*. The peculiar odour of wines depends on the volatile which they contain.

Neumann, in the following Table, exhibits the amount of these ingredients, contained in the most popular wines now in use:—

A QUART OF				CONTAINS OF											
				Highly rectified Spirit.		Thick, oily, unctuous, resinous Matter.			Gummy and tartareous Matter.			Water.			
				oz.	dr.	oz.	dr.	gr.	oz.	dr.	gr.	lb.	oz.	dr.	gr.
Burgundy	-	-	-	2	2	0	4	0	0	1	40	2	9	0	40
Champagne	-	-	-	2	5	0	6	40	0	1	0	2	8	3	0
Frontignac	-	-	-	3	0	3	4	0	0	5	20	2	4	6	30
Hermitage	-	-	-	2	7	1	2	0	0	1	40	2	7	5	20
Madeira	-	-	-	2	3	3	2	0	2	0	0	2	4	3	0
Malmsey	-	-	-	4	0	4	3	0	2	3	0	2	1	2	0
Rhenish	-	-	-	2	2	0	3	20	0	1	34	2	9	1	6
Sherry	-	-	-	3	0	6	0	0	2	2	0	2	0	6	0
Spanish	-	-	-	1	2	2	4	0	9	4	0	1	10	6	0
Vino Tinto	-	-	-	3	0	6	4	0	1	6	0	2	0	6	0
Tokay	-	-	-	2	2	4	3	0	5	0	0	2	0	3	0
Red Wine	-	-	-	1	6	0	4	40	0	2	20	2	9	3	20
White	-	-	-	2	0	0	7	0	0	3	0	2	7	0	0

Mr. Brande, Dr. Prout, and Mr. Zez have prepared similar but more accurate and extensive tables. A glance at the above analysis will show why wines are not so nutritious or innocent as is generally supposed.

2. *Combinations of malt liquors.*—The early and very general use of corn, in the preparation of malt liquors, led to the adoption of various methods by which this art might be brought to a state of comparative perfection. The object was, as much as possible, to “imitate nature,” or, by the chemical decomposition of the ingredients used in the process, to effect the production of a *wine of corn* in a manner similar to that of grape. The art of manufacturing malt liquors, it may be observed, is altogether the result of mechanical operation.

Those vegetables are employed in this process which contain saccharine matter in such abundance as will afford the *elements* for the production of alcohol. Barley has long been selected as the most suitable vegetable for this purpose. This nutritious grain contains a larger proportion of sugar and starch than most other vegetables. Starch is composed of almost the same elements as sugar, and is therefore easily convertible into that substance.

The conversion of barley into malt is a signal instance of the direct interference and control of man in the production of intoxicating drinks. It is effected by a process similar to the germination of plants, and has for its object, not the production of more nutritious food, but the change of solid nutritious matter into such a form as will best afford the development of alcohol. The remarkable difference which exists between barley and malt cannot escape the notice of

the most casual observer. The one is a heavy, hard, and horny substance, the structure of the other is much more light, soft, and floury. The difference in colour and taste, also, between the two is not less remarkable. Barley is rather transparent; malt opaque; the latter also is much sweeter than when in the state of barley. Barley undergoes divers operations previous to its conversion into malt. These processes are named *steeping, couching, flooring, and kiln-drying*. The process of *steeping*, or immersing or soaking in cold water, continues for forty-eight hours, which prepares it for *couching*, or placing it in heaps in which state it *heats*, and the process of *germination* commences; that is, sprouts of the future root and stalk protrude from the ends of the grain. After remaining thirty hours in this condition, it is *floored*; that is, spread out in thinner beds, where the process of germination goes on more uniformly, and this is completed in about twelve days. It is then consigned to the *kiln* for the purpose of being dried by its heat. The buddings of the spear, or sprit, are now rubbed off, and the malt is ready for bruising or grinding, and is thus prepared for brewing.

The following table of Prout will amply illustrate the changes which barley undergoes in its conversion into malt:—

	Parts Barley.				Parts Malt.			
Yellow resin,	-	1	-	-	-	1		
Gum - - -	-	4	-	-	-	15		
Sugar - - -	-	5	-	-	-	15		
Gluten - - -	-	3	-	-	-	1		
Starch - - -	-	32	-	-	-	56		
Hordein - - -	-	55	-	-	-	12		
	100				100			

In the state of barley, the hordein and starch form the largest proportions. The sugar and gum are but small in quantity. A large part of the hordein disappears in the malt, and is afterwards found to be converted into starch and sugar. The object of the brewer is by this means successfully effected, as the *elements* for the formation of a sufficient portion of alcohol are found to exist in the newly-acquired saccharine matter.

This artificial and tortuous process is attended with a loss of solid substance, and of course a proportionate destruction of nutritious matter. By the process of malting, barley increases two or three per cent. in bulk. On the average, it loses about one-fifth of its weight, or twenty per cent., twelve of which are to be ascribed to kiln-drying, and consist of water, which of course the barley would have lost had it been exposed to the same temperature. Thus the real loss does not exceed eight per cent.

Among the multifarious operations of brewing may be mentioned those of *grinding, mashing, hopping, boiling, cooling, cleansing, fining, attenuation, &c.*, each of which require great caution on the part of the brewer, or an imperfect liquor is the inevitable result. The process of brewing, however, in its simplified sense, consists merely of a decoction or infusion of malt and hops reduced to a state of fermentation by the addition of yeast or fermenting matter.

Sugar forms the basis of malt as well as of the juice of the grape. It follows that the nature of the fermentation of malt liquor is similar to that of wine. The proportions of saccharine matter are disarranged and re-united in the form of alcohol. The latter is formed exactly in proportion to the quantity of the former, which undergoes fermentation. Hence, the amount of alcoholic formation depends upon the proportion of malt used, and the greater or less perfection of the brewing operation.

The barley, by the operation of brewing, or more properly the malt, again sustains a serious loss of its solid substance. The infusion of malt in hot water extracts the saccharine matter, but leaves a considerable proportion of the *starch* in the grains: one of the principal objects, indeed, of the brewer is to make the water of such a temperature that it will not dissolve the starch, and thereby thicken the liquor. The gluten has already been seen to have nearly disappeared in the conversion of barley into malt; and even if it had remained, it could not exist in the liquor, because it is not capable of being dissolved in the water. The sugar is principally converted into alcohol, and the only proportion of solid substance left is the starch-gum, and the small quantity which remains of the undecomposed gum-sugar, both of which, in fact, from their minute proportions, present but feeble

claims on the score of nutrition. Hence when the liquor is properly prepared for consumption, a very diminished proportion of the nutritious qualities of the malt is found to remain. After fermentation, one quart of strong ale has been calculated to yield about three ounces of solid matter. In the condition of *sweet wort* it yields not less than six ounces.

The specific gravity of beer necessarily depends on the original soundness of the barley, and the extent of fermentation. The average specific gravity of beer and wort is 1.0676, that is beer 1.012, and wort 1.040. Professor Thomson distilled a sample of London-brewed ale and found its specific gravity 1.0255. The specific gravity of the malt from which it was made was 1.0676. More than two-thirds of the nutritious portion of the grain had been lost by fermentation. The ale, on which this experiment had been made, yielded nine per cent. of alcohol, or nineteen per cent. of proof spirit. Every pound weight of solid matter so decomposed is found to yield half a pound of alcohol of the specific gravity 0.825.

The following simple experiment leads us to the same conclusion: Evaporate a portion of ale over a sand-bath. The fluid part consists merely of water and alcohol, and of course evaporates. The weight, or proportion of the solid matter may then be easily ascertained. Dr. Charles A. Lee, of New York, and Professor Gale, of New York University, repeatedly made this experiment. The average quantity of extractive matter contained in a pint or sixteen ounces of North River ale was 816 grains, or about one-eleventh of the whole weight. This gave nearly nine ounces of solid matter to the gallon.

Good barley, which weighs 100 pounds, after it has been properly malted, loses exactly twenty pounds of its weight. The raw grain, however, if dried by itself at the same temperature with the malt would lose twelve per cent. of its weight. A loss, therefore, of eight per cent. only must be attributed to the process of malting.

Dr. Ure states this loss as follows:—

1½	per cent.	dissolved out in the steep water.
3	ditto	dissipated in the kiln.
3	ditto	by the falling of the fiboils.
0½	ditto	of waste.*
—		
8		
—		

Good malt in bulk exceeds barley by about eight or nine per cent.

“*In good fermentation,*” remarks Dr. Ure, “*seldom more than a fourth of the original gravity of the wort remains at the period of cleansing.* Between one-third and one-fourth is the usual degree of attenuation.”

The whole of the loss of solid matter

* Diet. Arts, Art. Beer, p. 95.

sustained by the process of malting and brewing is thus estimated:—

100 pounds of good barley, taken	} 100 lbs.
in its ordinary state of moisture - - - - -	
1. Loss of matter by the process of malting, &c., eight per cent. - - - - -	8
2. Loss sustained by the process of brewing - - - - -	67
—	
Total loss of nutritious soluble matter on both processes - - - - -	75 p' ct.

3. *Combination of distilled liquors.*—The combinations of distilled liquors depend altogether on the nature of the materials which have undergone fermentation. The process of distillation removes much of the vegetable matter which exists in the fermented liquors; indeed little afterwards remains in connection with the spirit but a greater or less proportion of water and essential oils, which mainly impart the peculiar flavour by which they are in general characterized.

The word *still*, and from thence *distillation*, is derived from the Latin word *stillare*, to drop, because the liquor which results from this process, as the vapour condenses, drops from an important tube connected with the apparatus.

Brandy is produced by the distillation of wine, or its *lees*, and the husks of the grapes from the wine-presses. It is composed of various proportions of alcohol and water, and obtains its flavour from a volatile oil contained in the skin of the grape, which is partially distilled over. The colour and peculiar taste of brandy are produced by means of caramel and burnt sugar, which are mixed with it for that purpose. Pure brandies derive their peculiar aroma from the kind of grape-juice from which they are distilled. It is on this account that the brandies of Rochelle, Languedoc, Bordeaux, Cognac, Orleans, Naples, &c., derive their peculiar odour and taste. Brandy is a corrupt abbreviation of the *brande-vin* of the French. The latter word is borrowed by our Gallie neighbours from the Saxon *brantwein*, which simply means *burnt wine*. Our old English writers call it *Nantze*, because this article of commerce was shipped from that port.

Gin, or *Geneva*, is distilled from the fermented liquor of malted barley and coarse rye, with the subsequent addition of juniper berries. From the latter addition it has received one of its names; the French word for juniper being *genevree*; hence our common word *geneva*. This liquor is considered to be of the finest quality when manufactured in Holland, and for this reason superior gin is commonly called *Hollands*. The English gin differs from that of the former country in being rectified with the oil of turpentine. The discovery of this spirit is

attributed to Sylvius, a professor of Leyden, who lived in the middle of the seventeenth century. It was at first sold as a diuretic in the apothecaries' shops; but as the common people drank it with avidity, it soon became an article of trade.* Gin, when properly prepared, consists of alcohol, water, and the essential oil of juniper.

The quantity of spirit contained in *pure* Hollands varies, according to Dr. Ure, from eighteen to twenty-one gallons per quarter of grain.

Dr. Ure informs us that a celebrated distiller, who had studied the art at Schiedam, attempted to introduce this spirit, in its genuine state, into general consumption in this country; but, remarks that writer, "he found the palates of our gin-drinkers too much corrupted to relish so pure a beverage."

Whiskey is the product of Ireland and Scotland. When genuine, it contains little else than alcohol and water, flavoured according to the peculiar method in which it is prepared. Immense quantities of contraband whiskey are manufactured in Ireland. The malt from which it is principally distilled is kiln-dried, with peat or turf, the smoke of which imparts a peculiar flavour to the spirit. The word *whiskey* is a corruption of *usque*, in the Irish phrase *usquebaugh*, or "water of life."

Rum, another popular beverage of the present day, is generally prepared by fermenting uncrystallized sugar or *molasses*, commonly called treacle. This liquor is principally manufactured in the West Indies and in Demerara, where sugar is grown in great abundance. The peculiar flavour of rum is derived from the essential oil contained in the raw juice of the sugar, and in particular in the cane, fragments of which are introduced into, and fermented with, the other materials. "This oil," remarks Professor Thomson, "is extremely stimulant, and acts upon the cutaneous vessels, causing diaphoresis. Age modifies this action; but most of the rum used in this country is newly imported."

Writers commonly derive the term *rum* from the terminating syllable of the Latin word *saccharum*, or sugar, the name by which this popular substance has been known from the earliest periods. In some of the West India islands it is customary to introduce sliced pine apples into punchcons of rum, which is from thence denominated *pine-apple rum*. Edwards rates the proportion of rum to sugar at eighty-two gallons of the former to 16 cwt. of the latter. Dr. Ure, however, states the rates as two hundred gallons of rum to three hogsheads of sugar.

The celebrated physician, Dr. Cullen, uttered the following memorable expression on this popular liquor: "If I were an absolute monarch, I would make a law that no

* Thomson, *Materia Medica et Therapeutics*.

rum should be distilled in my dominions except for my own use."

Spirits differ little in their effects; but the volatile oils which they contain render them dissimilar in taste and flavour. The interested views, however, of dealers in spirits have elicited much discussion on this subject. "Those who imported brandy," says Sir J. Sinclair, "took care to trump forth the virtues of that article; while, on the other hand," continues the same writer, "the West India merchants and planters thought it necessary to publish a defence of the superior qualities of rum." Between these various interested parties, the public have been lamentably deceived.

In the early part of this century, Parmentier was employed by the French government to ascertain whether *brandy* (*l'eau de vie*), or *pure spirits of wine* (alcohol), was the most fitted for the use of troops. The report recommended for use the natural spirituous liquors of the country, rather than spirits of wine; that is, in wine countries, brandy; in Normandy, spirits made from cyder and perry, and in Belgium and Holland from corn. Recent experience, happily points out a practice yet more productive of the health of troops,—abstinence from all spirituous or alcoholic liquors.

IV. *The comparative strength of intoxicating liquors.*—The analysis of wines has of late years occupied considerable attention. The following, according to Professor Brande, is the average of spirit contained in some of our most popular vinous compounds:

	Alcohol per cent.	Proof spirit per cent.
Port wine contains	23	46
Madeira -	22	44
Sherry -	19	38
Champagne -	12½	25

Professor Beck of America found the average of port and sherry to be as follows:

	Proportion of alcohol per cent. by measure.
Madeira, 14 different kinds	21·75
Port 3 ditto	22·60

From these tables it appears that the three wines most in general use contain nearly one-half their quantity of proof spirit. "It has been demonstrated," remarks Dr. Paris, "that port, madeira, and sherry, contain from one-fourth to one-fifth of their bulk of alcohol, so that a person who takes a bottle of either of them will thus take nearly half a pint of alcohol, or almost a pint of pure brandy."*

The quantity of alcohol found in malt liquors is considerably less than what is contained in wines; but *in the practice* of drinking, this difference avails little, inasmuch as some classes in particular indulge more frequently in wines and malt liquors. These liquors, moreover, are, in general, drunk in

larger quantities. The following is the average of Mr. Brande's calculation:—

	Alcohol per cent.	Proof spirit per cent.
Cider contains	7	14
Ale -	6½	13
Porter -	4¼	8½
Small beer -	1¼	2½

The calculations of Professor Beck are as follows:—

	Alcohol per cent.
Cyder -	4·68
Albany ale, in barrels -	7·38
Do. do. bottles, two } years old -	10·67

Stephenson, in a popular treatise on alimentary food, states that, some years ago, a Winchester quart of old sound porter would yield nearly six ounces of "good proof spirits," by careful distillation; but that the beer of the present day will not yield four ounces of the same spirit.* Modern brewers have found out a ready method of economising their malt, by substituting in its place a variety of intoxicating and pernicious drugs. Hence, the use of malt liquors is doubly injurious.

The amount of alcohol contained in ardent spirits in general use is more easily ascertained, although, as will afterwards be shown, they are extensively, and, when retailed, almost universally, adulterated. The following are the calculations of Professors Brande and Beck:—

	Professor Brande. Alcohol per cent.
Brandy -	53·39
Rum -	53·68
Gin -	51·60
Scotch whiskey -	54·32
Irish do. -	53·90
	Professor Beck. Alcohol per cent.
Brandy, common -	51·01
Gin, genuine Hollands -	55·44
Irish whiskey -	73·70
Whiskey, common -	42·95

From these calculations, it appears that the proportion of proof spirit in wines averages from one-fourth to one-fifth of the whole; ales rather more than one-seventh; cider rather less than one-seventh, and porter about eleven three-fourths. More than half the quantity of distilled liquors consists of alcohol in its pure state.

Scotch whiskey, according to Professor Brande, contains the largest proportion of alcohol, being upwards of 54 per cent. Rum, contrary to the general supposition, contains a greater quantity of alcohol than brandy. Gin, which contains about 51½ per cent. of alcohol, stands the next in order as regards strength. Port wine and madeira are about

* Paris's Pharmacologia.

* Medical and Economical Advice, by J. Stephenson, M.D., p. 117.

equal in strength. Cider exceeds London porter in alcoholic strength by nearly one-half, the former being 7.54, the latter 4.20. Brown stout and Scotch ale each contain about 6½ per cent. Burton ale, however, contains nearly 9 per cent.

The following table presents a more familiar mode of comparison.

3½ fluid ounces of alcohol are contained in about	{	1½ pint of brandy.
		1 " port wine.
		1½ " claret.
		2 " champagne
		or 5½ " Lon. porter.

The number of gallons of proof spirit distilled in the United Kingdom, in the year ending January 5, 1842, was,—in England, 5,919,207; in Scotland, 8,504,333; in Ireland, 6,359,124; total, 20,782,664. The number of gallons, however, of proof spirits on which duty was paid for consumption during the same period was,—in England, 8,166,985; in Scotland, 5,989,905; in Ireland, 6,485,443; total, 20,642,233. The amount of duty paid upon this quantity of spirits was £5,161,610, 15s. 6d. The amount of whiskey consumed in England is 2,247,778 gallons, which is the difference between the number of gallons distilled and the number on which duty was paid. The whole quantity of whiskey made from malt consumed in England does not exceed 520,942 gallons. A great proportion, therefore, of those individuals, who imagine that they indulge in "pure malt whiskey," are in egregious error. The quantity of Scotch whiskey consumed in England is 1,894,657 gallons, of which only 519,009 gallons are made from malt. The remainder is made from "a mixture of malt with unmalted grain." Ireland supplies England with 1933 gallons of whiskey made from malt. A characteristic national trait will be found in the home consumption of whiskey in these countries. In Scotland the consumption of whiskey is 5,989,905 gallons, of this quantity 5,375,162 are made from malt, and only 614,743 from a mixture of malt with unmalted grain. The reverse is the fact with regard to Ireland. In that country 6,485,443 gallons of whiskey are consumed; only 527,196 are made from malt, while 5,958,247 are made from a mixture of malt with unmalted grain.

V. *The comparative effects of intoxicating liquors on the human frame.*—It is in general understood, that the alcohol contained in fermented liquors exists in a peculiar state of combination, and that the vegetable matter contained in wines and malt liquors prevents to a considerable extent the injurious effects of the alcohol. Dr. Paris appears to be of this opinion. "Daily experience," observes that physician, "convinces us that the same quantity of alcohol applied to the stomach under the form of natural wine, and in a state of mixture with water, will produce very different effects upon the body, and to

an extent which it is difficult to comprehend; and, moreover, that different wines, although of the same specific gravity, and consequently containing the same absolute proportion of ardent spirit, will be found to vary very considerably in their intoxicating powers." In explanation of this assumed phenomena, Dr. Paris supposes the alcohol to be "so combined with the extractive matter of the wine, that it is probably incapable of exerting its full specific effects upon the stomach before it becomes altered in its properties, or, in other words, *digested*;" and he remarks, "this view of the subject may be fairly urged in explanation of the reason why the intoxicating effects of the same wine are so liable to vary in degree, in the same individual, from the peculiar state of his digestive organs at the time of his potations." Dr. Paris is not singular in his opinion. Wines, however, it must be remembered, are in general sipped in small but frequently repeated quantities. The system is thus *gradually* elevated to the required pitch of excitement: hence the grosser effects of fermented liquors are less easily perceived. The remarks of Professor Beck on this subject are interesting and important: "A half-pint glass of brandy-and-water, of common strength, contains an amount of alcohol but little less than the same measure of ordinary madeira, and, if these portions of wine and of brandy-and-water should be drunk in the same manner, the effects on the animal economy would not be so different as is generally supposed. Wine is usually taken in small quantities, and at intervals—circumstances which must have a great effect in modifying its action on the system; and to these may also be added the fact, that its habitual use impairs the susceptibility of the system to its intoxicating power."

"The inference of Dr. Paris," remarks Dr. C. A. Lee, "that *wine is less injurious than the same proportion of ardent spirit taken pure*, is wholly unsustained by proof, and seems to be derived solely from the fact that it is *less intoxicating*. Now, it does not follow that the injurious effects of two different liquors, are always proportioned to the degree of intoxication produced by them. The one may intoxicate to a considerable degree, and the effects pass hastily, while the other may produce but slight exhilaration, if any, and be followed by a serious derangement of the health. Wine-drinkers themselves have concurred in the correctness of our conclusions. They know the evils attendant on gorging the stomach with acids, resinous, oily, and extractive matter, with alcohol; and when they take stimulants because they think they require it, they are apt to take brandy or whiskey; wine is taken chiefly out of complaisance and fashion's sake."*

* Bacchus, Amer. Ed. Note, p. 236.

The *attenuation*, or, in more precise language, the *chemical combination* of alcohol with water, however, appears to exercise the most powerful influence in preventing that *gross* and more immediate power of intoxication which has been observed to attend more *recently combined* portions of spirit and water. In proof of this, Mr. Brande affirms, as the result of his experience, that when brandy and water are mixed, and allowed to remain in combination for some time, the intoxicating power of the mixture would not be greater than that of wine containing a similar portion of brandy or alcohol. "If the residuum," he remarks, "afforded by the distillation of 100 parts of port wine be added to twenty-two parts of alcohol and seventy-eight of water, in a state of perfect combination, *the mixture is precisely analogous*, in its intoxicating effect, to port wine of an equal strength." Hence the diminished power of *gross* intoxication in wine depends principally on the process of attenuation. Professor Beck states, that, in his opinion, it is "to this, more than the controlling effects of the other vegetable matter, that we are to ascribe their less decided intoxicating powers: and, on the contrary, it is to the imperfect union that the ordinary mixtures of brandy and water owe their more energetic action on the system."

Dr. Macnish, in his *Anatomy of Drunkenness*, states, "In the wine generally to be met with, much of the alcohol exists mechanically, or uncombined, and all this portion of spirit acts precisely in the same manner as if separately used."

Spirituous mixtures are in general taken before the attenuation in question can be even partially effected; and for this reason the effect produced does not very materially differ from that of the same proportion taken alone. The generally observed fact, that newly fermented wines are more powerfully intoxicating than old, may be attributed to the same cause. The alcohol of the latter, by their age, becomes more intimately *attenuated* with the water.

One of the principal arguments adduced in favour of the use of fermented liquors is thus found to be based on erroneous calculations. The difference in question does not arise from the extractive matter with which they are combined, but from the mere fact of more intimate attenuation having taken place. The conclusion we arrive at is, that the two kinds of mixtures under consideration, "if taken *under equal circumstances*, would differ little in their effects on the animal economy.

The delusion regarding the nutritious properties of fermented, and especially of malt, liquors, is astonishing, when it is considered how slight a proportion of solid and nutritious matter they contain, in addition to the alcoholic stimulus which all of them possess. Malt liquor has been extolled by British statesmen as "liquid bread," and as

a "highly nutritious beverage." Franklin greatly contributed to expose this popular fallacy. When a journeyman printer, in London, he informs us that he endeavoured to convince his fellow-workmen "that the bodily strength furnished by the beer could only be in proportion to the solid part of the barley dissolved in the water of which the beer was composed; and that there was a larger portion of flour in a penny loaf, and that consequently if they ate the loaf, and drank a pint of water with it, they would derive more strength from it than from a pint of beer." In proof of the correctness of this position, Dr. Franklin states as follows: "On my entrance, I worked at first as a pressman, conceiving that I had need of bodily exercise, to which I had been accustomed in America. *I drank nothing but water.* The other workmen, to the number of about fifty, were great drinkers of beer. I carried occasionally a large form of letters in each hand, up and down stairs, while the rest employed both hands to carry one. They were surprised to see by this, and many other examples, that the American aquatic, as they used to call me, was stronger than those who drank porter."

Dr. Cheyne, in his usual quaint and forcible manner, thus adverts to the innutritious property of the extract contained in malt liquors: "As to malt liquors, they are not much in use, excepting small beer, with any but mechanics and fox-hunters. The French very justly call them barley soup. I am well satisfied, that a weak stomach can as readily, and with less pain, digest pork and pease-soup as Yorkshire or Nottingham ale. They make excellent bird-lime, and when simmered some time over a gentle fire, make the most sticking, and the best plaster for old strains that can be contrived."*

Dr. John C. Warren, of Boston, America, on one occasion being asked if there was nutriment for a labouring man in strong beer, made this reply: "*There is none, or so very little, that one biscuit will afford a working-man more support than the beer which he will drink from sun-rise to sun-set.*"

This glutinous composition cannot certainly be supposed to contain any very large proportion of nutritious matter. All physiological writers, moreover, are agreed, that bulk, as well as quality, is necessary to healthy and perfect digestion.

It is usually supposed that ardent spirits are infinitely more injurious in their general effects than malt and other fermented liquors. It is certain, however, that the combinations of fermented liquors frequently render them more injurious than alcohol simply diluted and attenuated with water. The observations of two medical gentlemen, who have written largely on the subject, are adduced in support of this, perhaps, startling

* *Essay on Health and Long Life*, 9th ed. p. 60.

view. Dr. Maenish observes: "Malt liquors, under which title we include all kinds of porter and ales, produce the worst species of drunkenness; as, in addition to the intoxicating principle, some noxious ingredients are usually added, for the purpose of preserving them, and giving them their bitter." And again: "The effects of malt liquors on the body, if not so immediately rapid as those of ardent spirits, are more stupifying, more lasting, and less easily removed. The last are particularly prone to produce levity and mirth, but the first have a stunning influence upon the brain, and in a short time render dull and sluggish the gayest disposition." Much the same opinion is expressed by Dr. Charles A. Lee, of New York: "As a general rule, I hesitate not to aver, as my settled conviction, that malt liquors are more deleterious in their effect on the system than ardent spirits. The latter are simply alcohol and water, perhaps slightly flavoured; the former are deleterious compounds of alcohol, narcotic poisons, and mineral substances. Besides, as the fermentation which malt liquors undergo is imperfect, being stopped to prevent its change into vinegar, is it not to be renewed in the stomach, thus impairing the powers of digestion?" A similar view is taken by the same physician on the nature and operation of wines: "I know that it will be doubted by many that pure wine is as injurious as the same amount of alcohol diluted with water; but my own experience and observation, and the opinion of many reformed wine-drinkers, support me in this belief. I could relate numerous cases, where the wine of any kind could not be taken in any quantity, but where pure whiskey, or brandy-and-water, if nearly the same strength, could be drunk without causing the same unpleasant effects—and why should it not be so? In the one case, we have simple alcohol and water; in the other, alcohol and water, volatile oils, extractive and colouring matters, acids, &c. If the latter do not prove more difficult of digestion than the former, then it requires less strength to carry one hundred than it does fifty pounds.

"Most people know how speedily, comparatively, the effects of gin or whiskey pass away, and they also know how permanent are those occasioned by a debauch on fermented liquors; and if the wine-drinker suffer less than the whiskey-drinker, it is because the amount of alcohol he takes is less. Some flatter themselves that, by particular care in selecting their wines, they can avoid the evils which by this very act they allow do attach to the use of some wines; but let not the convivial possessor of ample cellars, stored with the choicest products of the vine, flatter himself with this belief; let him not, indeed, consider himself more fortunate than the poor man who is confined to whiskey, gin, brandy, or New-

England; for as long as the laws of the system and the properties of alcohol remain as they are, so long will he not be exempt from paying the full penalty of indulgence; a twinge of gout will revenge itself on a glass of champagne with greater certainty than on a glass of whiskey."

The following remarks of Mr. Henderson, on the peculiar qualities of wines, are interesting and to the point: "It is not to the brandy alone that the noxious effects of certain wines are to be ascribed. If the original fermentation has been imperfect, or if they contain an excess of acids, particularly the gallic or malic acids, their use becomes highly prejudicial, especially to persons of weak stomachs. When such wines are placed within the temperature of the human body, a renewal of the suppressed fermentation will take place, and what little alcohol they have will rather assist than counteract the acidifying process. Hence the unwholesomeness of most of our domestic wines, which are in general but imperfectly fermented, and contain a large portion of malic acid and free saccharine matter, and to many of which brandy is added to increase their strength. Perhaps, too, the predominant acids may undergo some transmutation in the stomach, which renders their presence still more detrimental." And again: "The gallic acid of port wines renders them unfit for weak stomachs. The excitement they produce is of a more sluggish nature than that attending the use of the pure French wines, and does not enliven the fancy in the same degree. As a frequent beverage they are unquestionably much more pernicious." In addition to these, Dr. Henderson adds the following judicious observations: "When introduced into the stomach, vinous liquors may be considered as acting in two ways; either by their chemical affinities, as they become mixed with the food, or by their stimulant operations on the nervous and muscular systems. Now, there is every reason to believe that in the former point of view they will not assist the digestion of proper nutriment *in the healthy subject*, but will have a directly contrary effect, especially if they contain much spirit or acid.—If they undergo decomposition, a portion of the saccharine and mucilaginous matter may, perhaps, enter into the formation of chyme, and a small quantity of the alcohol may be taken up by the absorbents; but this principle constitutes no part of the blood, and cannot therefore remain in the system. The neutral salts will, of course, exert their specific actions on the alimentary canal, or they may enter into partial combination with the food. In weak stomachs, however, where the muscular action is slow, even the purest wine is apt to generate a deleterious acidity; and the stimulant power of the alcohol, which, in persons of sounder habits, is sufficient to overcome its anti-

septic tendency, is thus completely lost. But that in persons of the strongest frame wine does not directly forward the process of digestion, is proved by the derangement of the alimentary organs, which always succeeds excessive indulgence in its use. Great drinkers, it is well known, are small eaters, and usually terminate their career by losing their appetite altogether."

"The beer-bibber," remarks Dr. James Johnson, "has probably little reason to exult over the dram-drinker. If he escape ascites, or dropsy of the abdomen, he runs the risk of hydrothorax, or water of the chest, a much worse disease! If he have an immunity from disorder of the *liver*, he becomes predisposed to derangements of the heart! If he experience not emaciation and tremors, he too often becomes over-loaded with fat, and dies apoplectic! If he is not so liable to maniacal paroxysms of fury, from the fire of ardent spirits, his intellectual faculties become sodden, as it were, and stupidity ensues!"

Mr. Maenish very properly comments on the inconsistency of those societies which allow their members to drink wine and malt liquors, while they debar them from ardent spirits. "They do this," he remarks, "on the ground that on the two first a man is much less likely to become a drunkard than upon spirits—a fact which may be fairly admitted, but which, I believe, arises in some measure from its requiring more money to get drunk upon malt liquors and wine than upon spirits. In abandoning the latter, however, and having recourse to the others, it is proper to state, that the person often practises a delusion upon himself; for, in drinking wine, such at least as it is procured in this country, he, in reality, consumes a large proportion of pure spirits; and malt liquors contain not only the alcoholic principle of intoxication, but are often sophisticated with narcotics." Again: "I know several members of the Temperance (Moderation) Society, who are practising upon themselves the delusion in question. They shun spirits, but indulge largely in porter—to the extent, perhaps, of a bottle a day. Nobody can deny that, by this practice, they will suffer a great deal more than if they took a tumbler or so of toddy daily; and the consequences are the more pernicious, because, while indulging in these libations, they imagine themselves to be all the while paragons of sobriety."*

VI. *Is alcohol "a good creature of God?"*—It is frequently urged, in opposition to one of the fundamental principles of the temperance reformation, that *alcohol is the product of nature, and therefore "a good creature of God," and to be received with thanksgiving.* The fallacy of this proposition admits of ready proof. Alcohol is

now universally acknowledged to be the product of vegetable decomposition. Hence, it is not eliminated from any *living* or natural process. On the supposition that the formation of alcohol is the result of natural laws, it may pertinently be inquired why man interferes with and disturbs the operations of nature at a *particular period*, that is, exactly at the commencement of her object, and thus prevents that ultimate action which otherwise would inevitably take place. The answer is simple and decisive. He arrests the operations of nature exactly at that period when he can supply himself with a product calculated to gratify his depraved and vitiated appetites. Hence the multifarious and complicated inventions of the wine-maker and brewer.

This branch of our inquiry may be better understood by a slight review of the active laws of animate vegetable creation, so far, at least, as they have connexion with the present object of our investigation. The constituent principles of vegetables consist of carbon, oxygen, and hydrogen. The poisonous upas and the nutritious grape, the fragrant rose and the nauseous assafoetida, the refreshing foliage and the delicate tints of the vast arcana of vegetable nature, each owe their peculiar quality to these simple substances. So wonderful, indeed, is the laboratory of nature, that even from the same trunk, and from a mass of sap, apparently homogeneous in its character, substances of a very opposite nature are produced. An oil, bland as that of the olive, is eliminated from the poppy, which in some parts of the globe is extensively employed for dietetic purposes. From the same plant is extracted the milky juice from whose substance is produced the poisonous opium. The delicious pulp of the peach also is well known to enclose in its kernel a poison of a most deadly character. Olive oil is another instance in point. Its chemical constituents approach near to those of alcohol; how materially, however, do these substances differ in their operation on the human system! These facts are sufficient to convince us how profound, and yet how simple, are the operations of Nature, and how boundless she is in her resources to supply the wants and to gratify the lawful pleasures of man.

The knowledge that the whole of this variety in vegetable creation is occasioned simply by a very slight variation in the combination of three simple substances, affords to us a distant idea how the *elementary principles* of alcohol may exist in nature, without the actual existence of alcohol itself. No human investigation has, as yet, nor indeed have we any reason to suppose it ever will, discover the slightest trace of native alcohol in any part of the creation of nature.

One or two familiar examples will place these positions in a still clearer light. Nitric

* Anatomy of Drunkenness, pp. 230-31.

acid, well known to be an active and fatal poison, and the air which we breathe, are both composed of two simple gases, nitrogen and oxygen, united, of course, in different proportions. A slight chemical operation may, however, alter the natural arrangement of these forms, and produce a new substance of an essentially different character. Few persons, however, would be bold enough to assert, that nitric acid is contained in the atmosphere; or, that air, when it comes in contact with the lungs, is productive of the same fatal effects as would result from contact with the former potent and corrosive substance.—Sugar, acknowledged by all to be a nutritious substance, may by chemical manipulation be resolved into oxalic acid, a deadly and destructive poison. An old piece of linen may, in like manner, be converted into sugar. Alcohol, by a simple process, can be produced from sugar; and yet, what rational being would maintain that alcohol is contained either in the linen or the sugar, or that either the one or the other would, in any quantity, produce intoxication?

The application of this argument is familiar and clear. Many persons assert that alcohol is contained in grain and fruit, and in every part of vegetable creation, and that therefore it is intended by the Creator for the use of man. Such, however, is not the case. The elements of alcohol, indeed, are to be found throughout the whole of vegetable creation, and so are the elements of other deleterious substances, but *not a particle of alcohol itself. So long as the chemistry of life retains its sway will the constituent materials of vegetable matter hold together in the relation in which nature has placed them.* Death, however, or, in other words, decomposition, subverts this natural arrangement, dissolves its connexions, and new and totally different combinations are thereby formed. So it is with alcohol. In wines, this poison undergoes evolution during the decay or decomposition of the juice of the grape; in malt liquors, man destroys the vital principle of the barley, by converting it into malt; and then subjects it to another artificial process, which produces results similar to those which take place in the production of wine.

The same class of objectors urge, that alcohol is as much the creature of God as beef or bread, and differs only in the form in which it was created by divine wisdom, as the flesh of animals differs after it has been submitted to the process of cookery, or flour, in the form of dough, after it has undergone the operation of heat in the oven. Herein lies an egregious error. Cooked food is a mere *modification* of substance, which, as experience shows, renders it more useful to man, and consequently more in unison with the design of the Creator. Alcohol, on the other hand, is a *new product* or *new combination*—the result of a

dissolution of the proximate elements of food, and the re-union of its ultimate principles in a totally different, innutritious, and destructive form. Flour, or flesh, we again affirm, in their baked or roasted state, are simple human modifications so far as their proximate constituent elements are concerned, and remain in an *unaltered* condition the *natural* production of an all-wise and benevolent Creator. Alcoholic liquors, on the other hand, are the production of human *invention*—the results of a tortuous process or chemical change, by which the “good creatures of God” are converted into unnatural and destructive poisons.

Alcohol then is not produced in the ordinary course of nature, and has no claim, therefore, in the true sense of the word, to be entitled “a good creature of God.” It is an unnatural combination of natural elements manifestly not in accordance with the will of the Creator. When used for the purpose, and in the manner prescribed by fallible man, it is productive of injurious results both to the health and morals. The elements of which alcohol is formed are in the strict sense of the word the creation of divine power; but that peculiar combination or form of these elements, which constitutes alcohol, is the result of decomposition or decay induced or directed by human agency.

“Alcoholic wine,” remarks Dr. C. A. Lee, “does not exist in nature. It is an artificial product, and requires great skill in its manufacture, and great care in its preservation; for, if left to the operation of the laws of nature, it would soon change into vinegar, and from that run into the putrefactive fermentation. We maintain that *wine* as well as *beer* is, *quoad hoc*, a *creature of art*, and not of nature; and those who say it is not must point us to it existing in nature without man’s supervision.”*

VII. *Alcohol not ready formed in fermented liquors.*—Another class of objectors urge that alcohol does not exist *ready formed* in fermented liquors, but that it is generated by the heat used in the process of distillation. The fallacy, however, of this view is manifest from several considerations, and by none more than by the following decisive experiment made by Mr. Brande, and subsequently confirmed by other distinguished philosophers: Add to wine a solution of the acetate of lead, and the colouring and extractive matter will be precipitated. The further addition of a small portion of dry subcarbonate of potassa separates the alcohol from the fluid which floats on the surface, and will ignite on coming in contact with a lighted taper. By this means we decisively determine that distillation merely separates the alcohol, which had been previously evolved by the process of fermentation; its con-

* Bacchus, American ed., note, p. 241.

stituent parts being thereby extracted, in their elementary forms, from the saccharine juices of the grain or fruit, and combined under a new, a potent, and a deleterious form.

Arguments like these are interesting, and even necessary to remove such objections as are urged in proof that alcohol is "a good creature of God." The great point however to be ascertained is, the effects of these liquors on the moral and physical powers of man. Let it be admitted, for the sake of argument, that alcohol is a creature of God, and no advantage will be derived by its advocates from the concession. Many of our most powerful poisons are the creatures of God. The poisonous opium and the deadly hemlock are each of them creatures of God; yet, the Creator nowhere authorizes his creatures to make use of them as habitual articles of diet. He has given to man the power of distinguishing between moral good and evil; and although the scientific knowledge of the precise character and quality of articles generally used for dietetic purposes may be limited in a great measure, to professional men, it is every man's duty, as it is obviously his interest, to acquire by experience all the knowledge he can upon that important subject, and conscientiously to abstain from every indulgence which is calculated either to affect his moral character or to injure the exquisite texture of his intellectual or corporeal frame. In this respect he is clearly responsible to his wise and benevolent Creator.

SECTION III.

ADULTERATIONS OF INTOXICATING LIQUORS.

How can wine possibly prove innocuous, when it is mixed with so many destructive ingredients?—
PLINY.

Root of hemlock, digg'd i' the dark,
* * * * *
Form a charm of powerful trouble,
Like a hell-broth, toil and bubble;
Double, double, toil and trouble,
Fire burn and cauldron bubble.—SHAKESPEARE.

I. Adulterations of Wines.—II. Adulterations of Malt Liquors.—III. Adulterations of Spirits.

THE adulterations of intoxicating drinks forms an interesting and important subject of inquiry. The value of the traffic led to an early adoption of this injurious practice. Ancient writers distinctly allude to the subject of adulteration.

The observations contained in the present chapter must not be understood to implicate all who are engaged in the manu-

facture and sale of intoxicating liquors.—Evidence, however, of the most conclusive character, demonstrates that the practice, although not universal, is very general, and that it is carried on to a most alarming extent.

This deleterious system has two objects in view, viz., 1st, to substitute an artificial compound at a cheaper rate in the place of the genuine article. This is effected by various means adapted to imitate the colour, taste, and intoxicating quality of the liquors professed to be prepared; and, 2ndly, to prevent these liquors from going into peculiar states or conditions, termed, by some, *diseases*, and thence popularly denominated the art of "doctoring." This practice will be explained in its proper place.

I. *Adulterations of wines*.—The wines of the ancients were frequently adulterated.—The writings both of Greek and Roman authors acquaint us with numerous receipts for this purpose. Their genuine wines were rendered more potent by the admixture of wines of a stronger kind, or, as was commonly the practice, articles were added with the view to impart to them an artificial flavour, as well as to render them more durable.

In a passage of the "Æsopus" of Alexis allusion is made to the practices of the Athenian wine merchants, who, as is humorously described, in order to spare the heads of their customers, put it out of their power to drink unmixed wine at their meals, by selling it ready diluted from the carts.*

Some allusions in the writings of Horace and Martial lead us to the conclusion that the manufacture of fictitious wines was not unknown among the ancients. Chian wine, so greatly esteemed in those days, would appear to have been imitated in Rome. Horace speaks of "Chian wine that had never crossed the seas;" Martial alludes to this practice no less distinctly,—

Thou, Phamphilus, Setine and Massic serv'st up,
But rumour thy wines has accurst.

In England, there are early notices of this practice. In the 2nd year of Edward the III., the king, in a letter to the mayor and sheriffs of London, complains of the adulterations of wine merchants: "They do mingle corrupt wines with other wines, and are not afraid to sell the wines so mixed and corrupted at the same price as they sell the good and pure, to the corrupting of the bodily health of those that buy wine by retail."† In this reign, a law was enacted, imposing penalties on adulterations, and directing that an assay of all the wines imported should be made, at least twice a year in every town.

In 1426, Sir John Rainewell, mayor, received information that the Lombard mer-

* Athenæus, x., 8.

† Maitland's London, b. i., p. 81.

chants were guilty of mal-practices in the adulteration of wines; upon inquiry, he ascertained that the charge was well founded, and ordered that the noxious compound, to the quantity of 150 butts, should be thrown into the kennel.*

In the sixteenth century, a similar enactment was passed in the 5th year of Mary. Much dread is expressed of adulteration of good wine, either with inferior wines or water, the penalty on discovery being the loss of their whole stock: "And besyde the samin sic wyne as are sould in common tavernis ar commonlie mixt with auld corrupt wyne and with watter, to the greit appeirand danger and seikness of the byaris, and greit perrell of the saulis of the sellaris."

In the seventeenth century, the practice of adulterating intoxicating liquors appears to have been very prevalent. It was common at that period to mix burnt lime or gypsum with dry Spanish wines. Shakespeare alludes to this prevalent custom:—"You rogue, there is *lime* in this sack too. There is nothing but roguery to be found in the villanous man!" Sir William Hawkins makes the following remarks, in his "Observation on a Voyage into the South Sea, A.D., 1622:"—"Since the Spanish sacks have been common in our taverns, which, for conservation, are mingled with the lime in the making, our nation complains of calentures, of the stone, the dropsy, and infinite other distempers not heard of before this wine came into common use. Besides, there is no year that it wasteth not two millions of crowns of our substance, by conveyance into foreign countries."

In the 12th Car. II., c. 25, sec. 11, certain restrictions are found in regard to the mixing and adulteration of wines. The guilty persons were subjected to heavy penalties on conviction.

The fictitious preparation of wines has been thus satirized in an old song:—

One glass of drink I got by chance,
'Twas claret when it was in France,
But now from it moche wider.
I think a man might make as good,
With green crabbes boild in Brazil wood,
And half a pinte of cider.

Addison, in "The Tatler," seems to have been well aware of the practice of palming fictitious wine on the public:—"There is in the city a certain fraternity of chemical operators, who work under ground in holes, caverns, and dark retirements, to conceal their mysteries from the eyes and observations of mankind. These subterraneous philosophers are daily employed in the transmutation of liquors, and, by the power of magical drugs and incantations, raising under the streets of London the choicest products of the hills and valleys of France.

They can squeeze Bourdeaux out of the sloe, and draw Champagne from an apple."

Virgil, in that remarkable prophecy, "*Incultisque rubens pendebit sentibus uva*," seems to have hinted at this art, which can turn a plantation of northern hedges into a vineyard. These adepts are known amongst one another by the name of *wine brewers*; and, I am afraid, do great injury, not only to her Majesty's customs, but to the bodies of many of her good subjects.

The present race of "chemical operators" are no less ingenious than those to which Addison alludes. Wine merchants' guides abound in recipes for the preparation and adulteration of fictitious wines. The present state of the wine trade, indeed, is such, that it is almost impossible to procure genuine wine of any description. It would appear that the quantity professed to be exported from Oporto, as pure port wine, is many times greater than the produce of that country. Dr. Lee, of America, confirms this remark: "It is believed," he observes, "that the annual importation of what is called port wine into the United States far exceeds the whole annual produce of the Alto Douro."*

Contrast the following table of exports from Oporto to the Channel Islands, with the imports from the Channel Islands to London:—

	From Oporto to Channel Islands.		From Channel Islands to London.	
1826	.	38	.	293
1827	.	99	.	99
1828	.	73	.	75
1829	.	0	.	90
1830	.	0	.	147
1831	.	0	.	143
1832	.	0	.	363
1833	.	0	.	862

"According to the custom-house books of Oporto, for the year 1812," says Dr. Henderson, "135 pipes and 20 hogsheads of wine were shipped for Guernsey. In the same year there were landed at the London Docks alone, 2545 pipes and 162 hogsheads from that island, reported to be port wine."

About 1812 some strange facts came before the notice of the public, which exhibit the practices of the craft, as well as the vitiated tastes of those by whom these wines are consumed. Some complaints were made respecting the method then commonly adopted of adding brandy to wine, in order, as it was affirmed, to bring it to a state of perfection. The correspondence took place between the agents and factors of the Oporto company, and may therefore be considered as authentic. The agents make the following observations, in reply to a letter of the factors, who defended the

* Dr. Hughson's London, p. 94.

* Remarks on Wines, by Charles A. Lee, M.D.
† Henderson on Modern Wines.

practice as necessary for the extension of the trade: "The English merchants knew that the first-rate wine of the factory had become excellent; but they wished it to exceed the limits which nature had assigned to it, and that when drunk it should feel like liquid fire in the stomach; that it should burn like inflamed gunpowder; that it should have the tint of ink; that it should be like the sugar of Brazil in sweetness, and like the spices of India in aromatic flavour. They began by recommending, by way of secret, that it was proper to dash it with brandy in the fermentation, to give it strength, and with elder berries, or the rind of the ripe grape, to give it colour; and as the person who held the prescription found the wine increase in price, and the English merchants still complaining of a want of strength, colour, and maturity in the article supplied, the recipe was propagated until the wines became a mere confusion of mixtures."*

The testimony just quoted is corroborated by numerous writers who demonstrate that the wines exported to this kingdom from various parts of the world are almost invariably adulterated with ardent spirit. Dr. Henderson, in writing upon port wine, remarks, "that with the people of this country, a notorious partiality exists in favour of a wine of which the harshness, bitterness, acidity, and other repulsive qualities, are only disguised by a large admixture of ardent spirit, but which long use has rendered so palatable to its admirers, that they fancy it the best of all possible wines." Dr. McCulloch has made some judicious remarks on the difference which exists between the light and quick flavour of pure French wines, and those adulterated with the addition of ardent spirit. "The common cause," says he, "of this evil is the admixture of brandy or spirits. This practice, universal in the wines of Spain, Portugal, and Sicily, which are intended for the English market, has also been introduced into our domestic wines, under the mistaken notion of preventing them from turning sour, and with the idea that it enabled them to keep for a longer time."

A gentleman, well acquainted with the practice of adulterating wines, writes thus: "Every one knows that the wines of Portugal, consumed in this country, are obtained exclusively through the medium of the Oporto wine company, who enjoy a monopoly of the trade, and whose interest and practice it has been to render all the qualities of port wine of nearly a similar taste, by means of the intermixture of the bad with the good. Were the above mixture all we had to complain of, it would

seem enough; but, in fact, the main evil arises out of it; for to make wine keep, which has been made from all sorts of grapes, it must be largely loaded with spirits, which being distilled from a mass of unripe as well as ripe fruit, with the rotten grapes and stalks superadded, produces a base deleterious substance. This, although called brandy, is not what we know under that name. The brandy in use in this country is distilled from grapes which have been grown on fine land, fully ripe, with spoiled part and stalks excluded, and has a fine rich taste and flavour; while the brandies chiefly used in preparing wines for our vitiated stomachs are either Portuguese or Spanish, and are of a kind so base as to be detected at once if tasted alone. Cognac and Nantz, like all other spirituous liquors, are bad enough, perhaps, but the abominable strengthener of almost all our wines, being distilled from the fermented refuse of half-ripe Spanish and Portuguese grapes, is positively poison. Our palates, our national taste, have become vitiated; nay, our very intestines, it may be said, have become trained, as it were, to crave for the deadly mixture. To drink wine largely has long been customary and fashionable; and to bring it within the reach of as many as could be, it had to be made as cheap as possible; and when the middling classes entered generally into its use, it had to compete and compare with the spirituous liquors they had been accustomed to drink; to do which, and to lighten up the dull and stupid, it was requisite it should inebriate in much about the same space of time as spirits did. The foreign wine companies, by degrees, came thus to charge it with the base and nearly unsaleable spirit before described; by which means they sent very inferior wine, with still worse brandy, to be here consumed under the name and at the price of wholesome, delicious, genuine wine."

The following observations, on this subject, are extracted from an article in a late number of the Quarterly Review:—"For the English market, the secondary growths and *vins ordinaires* of Medoc are bought up and mingled with the rougher growth of the Palus. And even this compound will not reach the proof for our fire drinkers; and because our mouths have been seared with brandied ports, there must be in Bordeaux a particular manufacture called *travail d'Angleterre*,—three or four gallons of the inflammable ink of Alicante, or Beni Carlo, with half a gallon of Stum wine, and a dash of hermitage to every hogshead of Medoc." The same reviewer, in treating of sherry, adds: "It is monstrous, that even this fine wine, so powerful in itself, should be defiled with brandy; and if the quantity do not, as Dr. Henderson asserts, exceed three or four gallons to the butt, it is several years before the wine recovers from its in-

* Original documents respecting the injurious effects and impolicy of a further continuance of the Portuguese Royal Company of Oporto. London, 1813, p. 40.

nuence and develops its own oppressed flavour. The vitiated taste of the English market is the only excuse for the merchants; for the wine itself cannot require the admixture." "We do think it a serious evil, no matter how produced or how far remediable, that the national taste should have become habituated to the brandied, fiery, deleterious potations which are known as common port." "The genuine supply of good Oporto is notoriously and utterly unequal to the demand which the protection occasions for it; and every temptation is, therefore, created to mix it with villanous trash, and to cover the adulteration with excessive quantities of brandy." "The Sicilian wines which we import are generally disguised and poisoned with the execrable brandy of the island; and this attempt to give strength to weak wines must always utterly extinguish their flavour. As long as the practice prevails, it is useless to hope for improvement, even though the hills at the foot of Mount Etna be, as one vast vineyard, producing great varieties of wine."

A traveller of comparatively recent date thus remarks on the wine of Xeres: "That which is sent to England is always mixed with *brandy*. Most of the wine-merchants in Xeres have distilleries to make brandy, to add to the wine, but do not export any."*

To these interesting quotations may be added some further remarks of Dr. Henderson: "The number of hands through which wine usually passes before it reaches the consumer, the great difference of price between the first rate and the inferior sorts, and the prevailing ignorance with respect to their distinguishing characters, afford so many facilities and temptations to fraud and imposition in this branch of trade, that no buyer, however great his caution, however just his taste, is wholly secure against them."

Dr. Charles A. Lee, of America, remarks on this passage: "The same is true of nearly all the port wine sold in the United States, and of the cheap port without exception."†

The same writer in another place remarks: "In this country, the manufacture of port wine is no longer a secret. The drinkers of it seem to care so little whether the article be genuine or not, that it would be an act of supererogation to attempt secrecy. All that appears to be required is, that it bear a good colour, and contain sufficient brandy. A red wine is imported from Marseilles and Bourdeaux, at about 40 cents a gallon, called French port, which is made into 'first rate' Oporto, by adding a little burnt sugar, or a decoction of Brazil wood, and a portion of alcohol. Sometimes also

it is mixed with real port, affording a very great profit to the dealer. But a large portion of what is sent into the country, and consumed under the name of port wine, is entirely a fictitious production."

Dr. Lee remarks, that in 1832 he met with "several cases of cholera, apparently induced by drinking cheap port wine."

The cheap port wine sold in this country is manufactured principally by that class of chemical operators to which Addison has made allusion. The Wine Guides contain ample directions for its easy manufacture.

The following among many other receipts for making port wine, found in Wine Guides, may suffice as a specimen:—Take of good cider 4 gallons, of the juice of red beet 2 quarts, brandy 2 quarts, logwood 4 ounces, rhatany root bruised $\frac{1}{2}$ a pound; first infuse the logwood and rhatany root in brandy and a gallon of cider for one week, then strain off the liquor, and mix the other ingredients, keep it in a cask for a month, when it will be fit to bottle."

A writer of talent, in the 43rd number of the Quarterly Review, makes the following remarks:—"The manufactured trash which is selling in London, under the name of Cape, Champagne, Burgundy, Barsac, Sauterne, &c., are so many specious poisons, which the cheapness of the common and inferior wines of the Cape allows the venders of them to use as the bases of the several compositions, at the expense of the stomach and bowels of their customers."

Mr. Busby, in his interesting work on the Wine Districts, states, in reference to the low-priced wines which are palmed on the public for sherry, that all these lower priced wines are largely mixed with brandy, being intended for the consumption of a class of people who are unable to judge of any quality in wine but its strength. The same writer remarks, that "*brandy is always added to the finest sherries on their shipment, to enable them to bear the voyage, it is said, but, in reality, because strength is one of the first qualities looked for by the consumers.*" Again, "*in no case do the exporters send a genuine natural wine, that is, a wine as it comes from the press, without a mixture of other qualities.*"*

Large quantities of fictitious sherry are manufactured in this country, of which some of the cheaper wines form the basis. To these are added brandy-cowe, extract of almond-cake, cherry-laurel-water, gum-benzoin, and lamb's-blood, as occasion or variety may require. Claret is equally adulterated with other wines. A small quantity of Spanish red wine, with a portion of rough cider, previously coloured by means of berry dye, or tincture of Brazil wood, is added to a cask containing inferior claret. The cheap placarders and advertisers are enabled to reduce their prices, by a

* Jacob's Travels in Spain, 4to, 1800.

† Bacchus, American ed., note, p. 252.

* Visit to the Vineyards of Spain and France.

little management in the apportioning what is used of the Spanish red wine and the cider.”*

“The Cape wine generally sold to the public is composed of the drippings of the cocks from the various casks in the adulterator’s cellars, the filterings of the lees of the different wines in his cellar, any description of bad or spoiled white wines, with the addition of brandy or rum-cowe and spoiled cider. “The delicately pale Cape sherry, or Cape Madeira, at astonishingly low prices,” and, of course, for *ready money*, is composed of the same delicious ingredients, with the addition of extract of almond cake, and a little of that delectable liquor, lamb’s-blood, to decompose its colour, or, in the cant phraseology, to give it complexion.”†

The Mechanics’ Magazine not long ago gave the following accurate analysis of a bottle of cheap port wine: “Spirits of wine 3 ounces, cider 14 ounces, sugar $1\frac{1}{2}$ ounces, alum 2 scruples, tartaric acid 1 scruple, strong decoction of logwood 4 ounces.”

The following recipe to colour claret and port will serve as an illustration of this method of imposition: “Take as many as you please of damascenes, or black sloes, and stew them with some dark-coloured wine, and as much sugar as will make it into a syrup. A pint of this will colour a hog’s-head of claret. It is also suitable for red port wines, and may be kept ready for use.”‡

If fictitious wines should perchance possess too high a colour, an equally efficient remedy is found: “If a butt of sherry is too high in colour, take a quart of warm sheep or lamb’s blood, mix it with the wine, and when thoroughly fine draw it off, when you will find the colour as pale as necessary.—The colour of other wines, if required, may be taken off in the same manner.”§

A recipe, which we now give from a work of authority, is said to produce a “beautiful red colour” in the manufacture of spurious port wine: “Take of raspings of red sandars wood six ounces, spirits of wine one quart; infuse fourteen days, and filter through paper for use. It produces a beautiful red colour for port wine.”||

The value of champagne renders it a fruitful subject in the hands of adulterators. Most of the second-rate champagne sold in this country is prepared from the juice of acid fruits, such as the gooseberry. Dr. Lee remarks, that the high price of good champagne wine has led to many adulterations and imitations of it, some of them of a most pernicious and dangerous character.—“Such,” he observes, “is the common one

by means of lead, which is practised to a great extent, among the dealers in France, in preparing wine for exportation. It consists of a solution of sugar of lead in water, with a small allowance of alcohol. By adding a little nitric acid, and then a portion of sulphuric acid, to a tumbler-full of this fluid, I have lately seen a deposit of sulphate of lead, in the form of white flakes, filling one-third of the glass, and this too in a sample that came direct from the importer.”—Champagne appears to be adulterated to such perfection, that even good judges are unable to ascertain the difference between the genuine and spurious article. In America, according to the same physician, the price of champagne varies from twenty shillings to thirteen dollars per dozen. Mr. Busby affirms, that genuine champagne is never sent out of France at less than three francs, or sixty cents, a bottle. We must conclude, therefore, that a considerable proportion of the wine sold in America under that name cannot be genuine.

The following paragraph relates to a practice of habitual occurrence:—“A company of Frenchmen have contracted with some farmers in Herefordshire for a considerable quantity of the fresh juice of certain pears, which is to be sent to them in London, immediately after it has been expressed, or before fermentation has commenced. With the recently expressed juice they made last year an excellent brisk wine, resembling the finest sparkling champagne; and we are told that the speculation was so productive, that they have resolved considerably to extend their manufactory.”*

The following important extract from the “Times” newspaper of June, 1838, is of considerable importance: “It is not, perhaps, generally known, that very large establishments exist at Cette and Marseilles, in the south of France, for the manufacture of every description of wines, the natural products not only of France but of all other wine-growing and wine-exporting countries. Some of these establishments are on so large a scale as to give employment to an equal, if not greater, number of persons than our large breweries. It is no uncommon occurrence with speculators engaged in this sort of illicit traffic, to purchase and ship imitation wines, fabricated in the places named, to Madeira, where, by collusion with persons in the custom-house department of the island, the wines are landed in the entrepot, and thence, after being branded with the usual marks of the genuine Madeira vintage, re-shipped principally, it is believed, for the United States. The scale of gratuity for this sort of work to the officials interested may be estimated by the fact, that, on one occasion, seventy pipes were thus surreptitiously passed at a charge of 1000 dollars. It is a

* Wine and Spirit Adulterations Unmasked, pp. 104 and 125.

† Deadly Adulterations, p. 20.

‡ The Vintners’ and Licensed Victuallers’ Guide, p. 238.

§ Ibid., p. 234.

|| Palmer’s Publicans’ Director, p. 91.

* Reece’s Monthly Gazette of Health, 1829.

circumstance no less singular, that the same manoeuvre is said to be commonly carried on with counterfeit wine made up in Certe and Marseilles, and thence despatched to Oporto, where the same process of landing, branding, and re-shipment, as genuine port, is gone through; the destination of this spurious article being most generally to the United States. Such is the extent of this nefarious commerce, that one individual alone has been pointed out in the French ports who has been in the habit of despatching, four times in the year, twenty-five thousand bottles of champagne each shipment, of wines not the produce of the champagne districts, but fabricated in these wine factories. It is known that the imposition of these counterfeit wines has arrived at such a pitch as to have become quite notorious, and the subject of loud complaint in the United States, at least."

Dr. Charles A. Lee says: "Champagne is made from Newark cyder (in America), in large quantities; and champagne baskets and bottles are in great demand for the purpose of replenishment." Again: "It is pretty well understood that such a thing as the *pure juice of the grape* is unknown in this country, and that a large proportion of the wines consumed in the United States is entirely factitious."*

It has already been seen that brandy is almost universally used in the fictitious preparation of wines.† This inflaming compound also appears to be the never-failing panacea when they are subject to *diseases*, and likely to run into *decomposition*. Other materials are, however, in common use. These are so numerous, that a few of them only will be presented to the notice of the reader.

The practice of using lead in the preparation of wine had its origin at an early date. It was not, however, until a comparatively late period that the custom was looked upon as dangerous in its effects. The ancients were accustomed to boil their wines in leaden vessels, although the admixture of other mineral substances was deemed injurious to health.‡

Lead is usually employed to improve the taste of acescent or harsh wines. The German emperors issued decrees against its use, betwixt the years 1498 and 1577. In the year 1696, several persons in the duchy of Wirtemberg were poisoned, in consequence of drinking wine adulterated with ceruse, a well-known preparation of lead. The practice was defended under the pretence that its use was sanctioned by physicians of high authority. The attention, however, of physicians and legislators was directed to the subject. Various articles in

particular appeared in the *Acta Germanica*, a publication of high repute.* The practice was universally condemned as dangerous, and in some of the German states it was made a capital offence.† Soon after this event, some individuals who had infringed this law were punished by hard labour. A wine-cooper at Esslingen revived this injurious practice, and induced other individuals in various places to adopt the same plan; he was condemned, however, to lose his head. Those persons who had the adulterated wines in their possession were severely fined, and the noxious compounds were destroyed.‡

The well-known endemic colic of Poitou, which first made its appearance in 1572, and raged with fearful violence for a period of sixty or seventy years, is now generally acknowledged to have arisen from the adulteration of wine with lead. The disease called lead colic thus derived its scientific name, *colica pictonum*. In 1781 and 1782, almost every individual of three regiments in Jamaica was attacked with an epidemic colic, which, on investigation, was found to arise from the presence of lead in the rum. Dr. J. Hunter, who paid some attention to this subject, seems to suppose that the lead might be dissolved in the spirit while passing through the leaden worms of the apparatus used in distillation.§ There appears some reason, however, to doubt this conclusion.

The lead colic, at one period, during the cider season, prevailed to a most alarming extent in the south-west counties of England. From evidence carefully collected by Sir George Baker it appears, that this epidemic arose from the cider being adulterated with lead, partly with the design to correct its acescence, when in a diseased state, and partly also from the liquor becoming impregnated with the metal through which it had to pass.|| The records of the French police bear testimony to the same iniquitous practice in 1696.

About 1750, a curious discovery was made by the farmers-general of France.—For some years previous to that date, it appears that 30,000 hogsheads of sour wine were annually brought to Paris, professedly for the purpose of making vinegar. The previous yearly imports, however, did not exceed 1200 hogsheads. On inquiry it was found that the vinegar merchants corrected the sourness of the wines with litharge, and thus made them in a fit state for the markets.¶

* Cockelius, *Acta Germ.*, Dec. 1, An. iv., Obs. 30. Brunnerus, *Ibid.*, Obs. 92. Vicarius, *Ibid.*, Obs. 100. Riselius, *Ibid.*, Dec. 1, An. v., Obs. 251.

† Gmelin's *Geschichte der Mineralischen Gifte*, 216.

‡ Beckmann *Geschichte der Erfindun* iii., Bd. s. 436, 8.

§ *Transact.* London Col. of Physicians, iii., 227.

|| *Ibid.*, i., 216.

¶ Paris and Foulblanque's *Medical Jurisprudence*, vol. ii., p. 347.

* *Bacchus*, American ed., p. 260.

† Wines that do not yield a sixth part of their quantity of spirit are not worth the expense of working.—*PUBLICANS' GUIDE*.

‡ *Plin. Hist. Nat.*, xxiii., 2.

There appears some reason to suppose that the practice is not unknown in France in the present day; and, as a well-known writer observes, the small tart wines used in such abundance, by people of all ranks in that country, hold out strong encouragement and facilities to its perpetration.* According to Cadet de Gassicourt, it is quite common in France to render brandy pale by means of the same pernicious ingredient.—Monsieur Boudet, indeed, detected in it several samples which were submitted to his inspection.†

Dr. Shearman relates a case of a fatal character, from the adulteration of Geneva with lead, which fell under his own observation. The criminal, in this instance, was an Excise officer, who pursued this nefarious practice, in order to enhance the price of gin, which he had seized in the performance of his duty. On investigation it was found that he had purchased twenty-eight pounds of sugar of lead at one time.‡

The following statement, among others, may be adduced in proof of lead or some other equally poisonous material being used in the adulteration of wine:—"On the 17th of January, the passengers by the 'High-flyer' coach from the north, dined, as usual, at Newcastle. A bottle of port wine was ordered, on tasting which, one of the passengers observed that it had an unpleasant flavour, and begged that it might be changed. The waiter took away the bottle, poured into a fresh decanter half the wine which had been objected to, and filled it up from another bottle. This he took into the room, and the greater part was drank by the passengers, who, after the coach had set out towards Grantham, were seized with extreme sickness; one gentleman, in particular, who had taken more of the wine than the others, it was thought would have died, but has since recovered. The half of the bottle of wine sent out of the passengers' room was put aside, for the purpose of mixing negus in the evening. Mr. Bland, of Newark, went into the hotel and drank a glass or two of wine-and-water. He returned home at his usual hour and went to bed. In the middle of the night he was taken so ill as to induce Mrs. Bland to send for his brother, an apothecary in that town; but before that gentleman arrived he was dead. An inquest was held, and the jury, after the fullest inquiry, and the examination of the surgeon, by whom the body was opened, returned a verdict of—*Died by poison.*"§

In Graham's Treatise on the Preparation of Wines, under the division entitled "*Se-*

crets belonging to the Mysteries of Vintners," p. 31, is found the following direction to prevent wine from becoming acid:—"To hinder wine from turning, put a pound of melted lead, in fair water, in your cask, pretty warm, and stop it close;" and "To soften gray wine, put in a little vinegar, wherein litharge has been well steeped, and boil some honey to draw out the wax, and strain it through a cloth, and put a quart of it through a tierce of wine, and this will mend it." The *Vintners' Guide* contains some directions for clearing cloudy or muddy wines. Sugar of lead is one of the articles recommended to be used for this purpose. "Gypsum or alabaster is used to clear cloudy white wines, as also fresh slaked lime, and the size of a walnut of sugar of lead, with a table-spoonful of sal enixum, is put to forty gallons of muddy wine, to clear it; and hence, as the sugar of lead is decomposed, and changed into an insoluble sulphate of lead, which falls to the bottom, the practice is not quite so dangerous as has been represented."*

Accum states that the most dangerous adulteration of wine is by some preparation of lead, which possesses the property of stopping the progress of ascension, and also of rendering white wine, when muddy, transparent. I have good reason, he further observes, to state, that lead is certainly employed for this purpose. "The effect is very rapid, and there appears to be no other method known of rapidly recovering rosy wines."† And again: "Wine merchants persuade themselves that the minute quantity of lead employed for this purpose is perfectly harmless; but chemical analysis proves the contrary; and it must be pronounced as highly deleterious. Lead, in whatever state it is taken into the stomach, occasions terrible diseases; and wine, adulterated with the minutest quantity of it, becomes a slow poison. The merchant or dealer who practises this dangerous sophistication adds the crime of murder to that of fraud, and deliberately scatters the seeds of disease and death among those who contribute to his emolument."‡

Orfila, in his work on Poisons, has the following passage: "*Sugar of lead, cerusse, and still more frequently litharge, are mixed with acid or sharp-tasted wines, in order to render them less so; and these substances do, in fact, give them a sweet taste.*" The same writer describes the effects of lead as follows: "It gives a sweet, astringent, metallic taste, constriction of the throat, pain in the stomach, desire to vomit, or vomiting;" and "fœtid eructations, hickup, difficulty in respiration, thirst, cramps, coldness of limbs, convulsions,

* Treatise on Poisons by Professor Christison, 1832, p. 479.

† Sur les Vins lithargyries, Mem. de l'Academie, 1787, p. 280.

‡ Transactions of the Medical Society of London, 1810.

§ Monthly Magazine, March, 1811, p. 188.

* Vintners' and Licensed Victuallers' Guide, p. 225.

† Accum's Culinary Poisons, p. 95.

‡ Ibid.

changes of feature, delirium." Death frequently terminates the scene.

Dr. Ure remarks, on this subject, as follows: "Oxides of lead, having the property of forming with the acid of vinegar a salt of an agreeable taste, which does not alter the colour of the wine, and which, besides, has the advantage of stopping fermentation and putrefaction, might be very well employed to remedy the acidity of wine, if lead and all its preparations were not pernicious to health, as they occasion most terrible colics, and even death, when taken internally. We cannot believe that any wine-merchant, knowing the evil consequences of lead, should, for the sake of gain, employ it for the purpose mentioned; but if there be any such persons, they must be considered as the poisoners and murderers of the public."* Alas! for human nature, many such "poisoners and murderers of the public" are in active operation. Dr. Ure, a little further on, adds, in relation to the acesency of wine, that, "it cannot by any good method be remedied, and that nothing remains to be done with sour wine but to sell it to vinegar makers, as all honest wine-merchants do."

Dr. Lee thus remarks on this practice: "Wine dealers, doubtless, suppose that the quantity used is too small to produce any bad effects; but the numerous instances on record of poisoning by this article proves the incorrectness of this doctrine. More than fifty cases have fallen within my own observation, where persons have suffered severely from the use of cheap wines, and two or three cases of death, most probably owing to the same cause."† It has already been stated, that Dr. Lee discovered the presence of a considerable quantity of lead in some champagne which came direct from the importer. The author of *Wine and Spirit Adulterators Unmasked* states, that two instances came under his observation, in which some persons were made ill, after drinking some cheap champagne. On analysis, it was found to contain a portion of lead in its worst form.‡—Dr. Warren relates the circumstance of thirty-two persons who became seriously ill after indulging in white wine, which had been adulterated with lead. One of them died and another became paralytic.§ Dr. Johnston observes, that "lead, in its metallic state, like all the other metals, is probably inert; but is so easily acted upon by the weaker acids and alkalies, that it cannot be taken in this form without imminent danger."¶

Lead, however, is not the only pernicious ingredient by which wine is adulterated.—The Spaniards, according to some writers, employ arsenic, and even corrosive sublimate, in the preparation of their wines, in order, as a recent writer remarks, to free their vintages, and render them more firm and durable.* The Dutch also are said to have had recourse to the same nefarious practice.†

Professor Christison relates an interesting case of adulteration with arsenic, and its effects. The family of a baronet in Roxburghshire, with several visitors, in all amounting to six persons, were taken severely ill after partaking, during dinner, of some champagne. The symptoms were severe pain of the bowels, sickness, and vomiting, which continued until next morning.—During the night all were affected with a sense of heat in the stomach, throat, and mouth, and in the morning the lips became encrusted, and the skin cracked and peeled off. For three or four days the whole party had a disinclination to eat. The remains of a bottle of the champagne, used on this occasion, were tested with sulphuretted hydrogen gas. Two ounces of the wine gave one grain and a quarter of the sulphuret of arsenic, corresponding to one grain of the oxide of arsenic.‡

Preparations of iron are also frequently used to improve the colour of wines. A conclusive example of this practice, not long ago, came under the author's notice, and he has since ascertained that the practice is general.

Wines, it appears, are not only *doctored*, to use a technical phrase, to remove certain states of disease, but certain ingredients are added to them, in order to impart to them particular flavours; in other words, to render them as near as possible similar to such celebrated grape wines as are in most demand in the market. Thus, to use the words of a well-known writer, bitter almonds are added to give a nutty flavour; sweet-briar, orris-root, clary, cherry-laurel-water, and elder-flowers, to form the bouquet of high-flavoured wines; alum, to render young and meagre wines bright; Brazil-wood, cake of pressed elderberries and bilberries, to render pale faint-coloured port of a deep rich purple colour, oak sawdust, and the husks of filberts, to give additional astringency to unripe red wines, and a tincture of the seeds of raisins to flavour factitious port wine.§

The production of such a *crust*, or lining,

* Dr. Ure's Chemical Dictionary, Art. Wine.

† Remarks on Wines, by Charles A. Lee, M.D., New York, 1835.

‡ Wine and Spirit Adulterators Unmasked, p. 140.

§ Medical Essays, vol. ii., p. 86.

¶ Essay on Poisons

* Henderson on Modern Wines, p. 341.

† Metodo di conoscere alcune delle piu dannose adulterazioni che si fanno ai Vini. 8vo. Fireze, 1786. —Deutschland's Weinbau; Von J. C. Gotthard, 8vo. Erfurt, 1811. II. B. s. 379.

‡ Edinburgh Medical and Surgical Journal, vol. xxxiii., 1830, p. 67.

§ Vintners' and Licensed Victuallers' Guide, p. 259.

on the interior of the bottles, as will give wine an appearance of age, forms another important process in the preparation of factitious wines. "This is effected by means of a saturated solution of cream of tartar, coloured with Brazil-wood or cochineal, and is invariably pointed at as a sure indication of old age." It is also a common practice to stain the lower part of the corks, to imitate the red colour of port, so that when drawn they may indicate the length of time the wine has been bottled. Accum observes, that "the preparation of an astringent extract, to produce from spoiled home-made and foreign wines a *genuine old port*, by mere admixture, or to impart to weak wine a rough austere taste, a fine colour, and a peculiar flavour, forms one branch of the business of particular wine-coopers; while the mellowing and restoring of spoiled white wines is the sole occupation of men who are called *refiners of wine*."

P. C. Blackett, Esq., Surgeon, R.N., makes the following singular statement of a circumstance which occurred in Paris not many years ago: "I knew a friend," says he, "who, when at Paris, some years back, gave a dinner; he sent to a wine-merchant, ordered a variety of French wines, which that day appeared excellent; a few bottles were left, which he carefully put away, thinking to give a friend, at some future period, a treat. About three weeks after this grand dinner, he invited a friend or two to partake of these superior wines; but, when he drew the corks, he found in the bottles a stinking and ropy composition. He remonstrated with the French wine-merchant. The Frenchman said, 'You ordered wine for such a day; was it good?' The answer being, 'Yes;' 'Well, then,' said the merchant, 'that is enough: I did not send you wine for that day three weeks.'"

"Several years ago," says a respectable authority, "De Witt Clinton was dining with several gentlemen at the house of a wealthy merchant in Albany. The conversation very naturally ran upon the wines which were set before them. Governor Clinton selected one as his favourite, and pronounced it the best he had ever tasted. The seller of the wine has since told the merchant that it was wholly factitious, and had not one drop of the juice of the grape."*

A more recent and extraordinary circumstance of this kind was reported, as follows, in the public papers: On the 24th of August, 1842, William H. Bond, a wine and spirit dealer of Brierly Hill, near Dudley, summoned Adolphus Blumenthal, a wine and spirit merchant of Birmingham, before Charles Shaw, Esq., and J. B. Milsom, Esq. M.D., both magistrates of Birmingham, for "falsely pretending to sell to W. H. Bond

a pipe of port wine, and obtaining from the said W. H. B. £57, when in truth and in fact he did not sell to W. H. B. any port wine, but a certain deleterious mixture of cider and other ingredients, not being nor consisting of port wine, with intent to cheat and defraud the said W. H. B. of his money."

It was shown in evidence that Bond in January last bought some wine by auction, and after the auction made a bargain with the auctioneer for a pipe of wine to be equal to the sample then tasted. The auctioneer was agent for Blumenthal. Considering Blumenthal an honourable and respectable wine-merchant, he did not taste the wine until a few weeks since; he then bottled 48 dozen of it; after it was bottled, it was in a state of fermentation, and several bottles burst; he then uncorked the remainder, poured it back into the cask, and sent some of it to be analysed. It was stated in the invoice to be a "pipe of fine port wine," and, in a note accompanying it, it was represented as of "good quality," and the words were added, "I hope it will insure your future favours." Proof was adduced to the magistrates by Bull, the cellarman of Blumenthal, that by his orders he took a good old pipe, having all the marks of one which had contained good old port wine, and into this cask he put 120 gallons of stuff, consisting of 60 gallons of cider, 50 gallons of Spanish red wine known by the name of pontac, which was to give the whole a good colour, and to this he added 10 gallons of British brandy. The whole was then well shook up, the good old pipe headed and despatched to Bond in pursuance of his order for a "pipe of good old port wine." The argument adduced by the counsel for the defendant was, that there was a difference between public-house wine and the wine for a private table; this was a public-house wine, and sold at a price accordingly. The defendant was held to bail to plead to any indictment that might be preferred against him at the sessions. It would be no difficult matter to adduce other equally luminous examples.

II. *Adulterations of malt liquors.*—Malt liquors, in the present day, are almost universally adulterated. The annals of the Court of Excise bear evidence of the nature and extent of this illegal practice. In a work of considerable merit, recently published, the various adulterations used in the preparation of malt liquors are detailed at some length. In reference to London porter, the writer expresses his unqualified opinion that its nutritious qualities are greatly overrated. He then proceeds to allude to the various methods employed to adulterate this popular beverage, in allusion to which practice, he thus remarks: "I disclaim any intention to particularize establishments that use these ingredients; it would be useless to do so,

* Newark Advertiser, America, 1840.

because each of them practise it, in proportion to the extent of its business.”*

The author of a popular Treatise on Brewing, after enumerating several materials used in the preparation of porter, such as *cocculus indicus*, *capsicum*, *headings*, &c., remarks, that “however much they may surprise, however pernicious or disagreeable they may appear, I have always found them requisite in the brewing of porter, and they must invariably be used by those who wish to continue the taste, flavour, and appearance of the beer. I could never produce the present flavoured article without them. The intoxicating qualities of porter are to be ascribed to the various drugs intermixed with it. It is evident some porter is more heady than others, and it arises from a greater or less quantity of stupifying ingredients. Malt, to produce intoxication, must be used in such large quantities as would very much diminish, if not totally exclude, the brewer’s profit.”†

The statistics of the revenue returns supply us with corroborative testimony on this point. It appears that, in the period between the years 1720 and 1730, there were consumed in the manufacture of 3,733,000 barrels of beer, 500,000 quarters more of malt than from 1790 to 1800, in brewing 6,170,000 barrels. Excessive adulteration alone accounts for this amazing and singular disproportion. The testimony of a scientific work, lately published, adds additional strength to these remarks: “It is absolutely frightful to contemplate the list of poisons and drugs with which malt liquors have been (as it is technically and descriptively called) *doctored*. Opium, henbane, *cocculus indicus*, and Bohemian rosemary, which is said to produce a quick and raving intoxication, supplied the place of alcohol; aloes, quassia, gentian, sweet-scented flag, wormwood, horehound, and bitter oranges, fulfilled the duties of hops; licorice, treacle, and mucilage of flax seed, stood for attenuated malt sugar; *apsicum*, ginger, and cinnamon, or rather cassia-buds, afforded to the exhausted drink the pungency of carbonic acid; burnt flour, sugar, or treacle, communicated a peculiar taste, which porter-drinkers generally fancy; preparations of fish assisted in cases of obstinacy with oil of vitriol, procured transparency. Besides these, the brewer had to supply himself with lime, potash, salt, and a variety of other substances, which are of no other use than in serving the office of more valuable materials, and defrauding the customers.”‡

* Art of Brewing on Scientific Principles, London, 1842.

† Every Man his own Brewer: explaining the Art and Mystery of Brewing Porter. By Samuel Child, brewer.

‡ Donovan’s Domestic Economy. Cabinet Cycloped., p. 291.

Other testimonies might be enumerated at considerable length, all of which bear equally strong evidence of the extent of this nefarious system. The number of *Brewers’ Guides*, and other similar treatises, combined with their extensive circulation, is additional and powerful proof of the same fact. These books contain ample directions for the preparation of these noxious materials. A few practical examples will now be presented to the reader. The treatises published by Samuel Child and Alexander Morrice are those which call for special attention. The following is a specimen from Mr. Child:—“It is recommended to the notice of families, as a subject for economical consideration. Nine barrels of porter, paid for at the public-house, cost eighteen guineas, and nine barrels of exactly the same quality, strength, &c., as porter, might be produced, excluding time and trouble, for £6. 7s. 11d., leaving, to the economical brewer of his own porter a clear profit of £12. 10s. 1d., very near twelve guineas, and almost two-thirds of the whole expense.” “That this calculation,” continues our honest author, “may not be objected to as enormous, or improbable, the following statement of the ingredients, and their separate expenses, will convince the most incredulous and disbelieving.”* Our author then proceeds to make out his case by an enumeration of the variety and expense of the articles necessary for the manufacture of porter. These amount to sixteen in number, and include the following singular ingredients: *capsicum* (or *Cayenne pepper*), *cocculus indicus*, salt of tartar, headings, ginger, and slacked lime. “The headings is a mixture,” says Mr. Child, “of half alum and half copperas, ground to a fine powder, and is so called from giving to porter that beautiful head or froth which constitutes one of the peculiar properties of porter, and which landlords are so anxious to raise to gratify their customers.”†

The following is one of three modes of brewing porter laid down in the practical treatise of Mr. Alexander Morrice:—‡

	cwt.	qrs.	lbs.
Malt, 25 quarters			
Hops - - -	1	2	0
Cocculus indicus -	0	0	6
Leghorn juice -	0	0	30
Porter extract -	0	0	4

These materials were to make eighty-nine barrels of thirty-six gallons each. The economical genius of this well-known writer may be estimated, when it is ascertained

* Every Man his own Brewer.

† Ibid.

‡ A Practical Treatise on Brewing the various sorts of Malt Liquors, with examples of each species, &c., &c., the whole forming a complete Guide to Brewing London Porter, &c. By Alexander Morrice, Common Brewer. 7th Edition. London, 1827.

how the “remaining goods” may be made into small beer. This he proposes to effect by adding “3 lbs. of *cocculus indicus* berry, ground fine, and 4 lbs. of *fabia amara*, or bitter bean, but little known to brewers in general, but a good substitute for hops and malt.”

LONDON ALE.

	cwt.	qrs.	lbs.
Malt, 25 quarters.			
Hops - - -	1	3	10
Grains of paradise -	0	0	4
Coriander - - -	0	0	4
Orange powder - -	0	0	4

Ginger, salt, and flour are to be used in the cleansing process.

WINDSOR ALE.

“This ale,” affirms Mr. Morrice, “has experienced so great a demand in London and its vicinity, for a few years past, as materially to affect the London pale beer brewery. I shall present you with the most approved and generally received mode of brewing it.

	cwt.	qrs.	lbs.
Malt, 25 quarters.			
Hops - - -	2	0	0
Honey - - -	2	0	40
Coriander seed - -	0	0	4
Grains of paradise -	0	0	2
Orange peel - - -	0	0	3
Ground licorice - -	0	0	12

Add a little salt and bean flour for cleansing, and the liquor is fit for use.”

BROWN STOUT.

“This liquor,” remarks the same writer, “since the rise in the price of malt and hops has compelled brewers to run the uncommon lengths they have for porter, has come into very general use. I shall, therefore, give you the necessary instructions for brewing it.”

	cwts.	qrs.	lbs.
Malt 20 quarters.			
Hops - - -	2	0	0
Cocculus indicus -	0	0	4
Sugar - - -	0	0	28
Fabia amara - - -	0	0	6

This liquor has very correctly been called stout.”

In giving a recipe for *Reading Beer*, Mr. Morrice adds, “This is a beer much praised by many persons.” The materials are “malt, hops, grains of paradise, coriander seeds, sugar, and Indian bark.”

AMBER BEER, OR TWOPENNY.

“This beer,” says Morrice, “is both pleasant and *wholesome*, and is in almost as much request as porter during the winter, when it is drank warm. It is unquestionably the most profitable of all malt liquors, as it is sent out to the customers within a

week from the time of brewing, and usually consumed within the following one.

	qrs.	lbs.
Malt 25 quarters.		
Hops - - -	1	0
Leghorn juice - -	0	20
Molasses - - -	0	30
Grains of paradise	0	4
Capsicum - - -	0	4”

This “pleasant and wholesome” beverage is to be cleared on the evening of the third day, using at the time four pounds of ground ginger, half a pound of bay salt, and a quartern of flour.

WELCH ALE.

“This,” remarks our author, “is the most luscious and richly flavoured ale I ever drank. I saw the whole process at Caernarvon, in Wales.” The ingredients are malt, hops, sugar, grains of paradise, and licorice root.

POCK.

Ingredients—malt, hops, *cocculus indicus*, sugar, *fabia amara*, and capsicum.

“This is a beer that has, within a few years, had a great run.”

TABLE BEER.

Ingredients—Spanish juice, licorice-powder, grains of paradise, salt, ginger, and flour.

“This makes a drink than which nothing can be more wholesome, and the want of it be more missed.”

COMMON BEER.

Recipe for 150 barrels.—“Use half a barrel of colouring, $\frac{1}{4}$ cwt. cream of tartar, $\frac{1}{4}$ cwt. ground alum, 1 lb. salt of steel, and 2 barrels of string finings. Mix well, &c.—Your own GOOD SENSE will show you how, to advantage.”

The reader will, by this time, be fully prepared to express his opinion on the preparation and sale of these “wholesome liquors.” He will clearly comprehend that the books from which the foregoing startling quotations have been made cannot have attained so large a circulation from motives of mere curiosity. Indeed, some of our honest “practical” brewers declare this to be the fact, and, reckless of human health, have made free and extensive use of the recipes recommended for their adoption.

The author of a popular work, “The Domestic Chemist,” enumerates thirty-four different vegetable and animal adulterations of beer, and twelve belonging to the animal kingdom. “The object of the brewer,” he remarks, “is to save malt and hops; the object of the publican is to multiply or increase the quantity of his beer. The liquor produced by the doctoring brewer is a spurious imitation of beer; that produced by the doctoring publican is a mixture of good

beer with coloured water. Either of these liquors is wholesome, dangerous, or poisonous, according to the proportion which its noxious ingredients bear to malt, hops, and water. When the brewer makes a large quantity of beer from a small quantity of malt and hops, or when the publican mixes his strong beer with water or small beer, the product is always in a state of disease, that is to say, the resulting beer is so weak and vapid, that no mortal man can be induced to pour it down his throat. But as a beer of this sort is always made to sell, and as nobody will drink it in a state of evident disease, the ingenuity of the beer doctor is taxed to supply the means of giving a healthy appearance to the liquor which is afflicted with the most incurable disorders. It is not desired either by the brewer or publican, that the diseased beer should be rendered absolutely good; it is quite sufficient for their purposes that it should be made to appear good. All that they insist upon is, that the beer should be put into a saleable state.—They do not trouble themselves with reflections about its wholesomeness or unwholesomeness, nor indeed is there any reason why they should; for it is very evident that reflections of that sort ought to be made by the individuals who have the drinking of the beer, and not by those who have the selling of it.” This writer then enumerates the diseases of beer. These are, 1, *want of alcohol*; 2, *want of sugar*; 3, *want of alum*; 4, *want of bitterness*; 5, *want of pungency*; 6, *muddiness*; 7, *want of age*; 8, *want of astringency*; 9, *old age*; 10, *want of froth*. For the cure of these diseases forty-eight different adulterating materials are given, among which are included treacle, ginger, coriander, honey, caraway, horehound, gentian, aloes, flag, henbane, and St. Ignatius bean, &c., &c.* The coolness with which certain noxious materials are directed to be used in Brewers’ Guides would excite a smile, were not our indignation roused at the consequences which result from so dangerous a practice. A few of these examples may not prove uninteresting, and may, at the same time, unfold to the reader the honesty and humanity of the system. Perhaps those given by Mr. Child may be the most instructive. “Alum,” says this enlightened and practical writer, “gives a smack of age to beer, and is penetrating to the palate.”—Mr. Child still further enlightens the fraternity of brewers, by giving them instruction in the art of bringing beer forwards, or, in other words, giving to new beer the taste and appearance of old. “To make new beer old, add oil of vitriol; an imitation of the age of eighteen months is thus produced in an instant.”†

The reader may now naturally inquire

how far others of the same fraternity coincide with Mr. Child, in the “practical” nature of his directions. One or two illustrative examples are now adduced. Mr. Morrice, on the subject of “heading,” remarks, that “there are various ways of making heading, some using ground copperas, and alum, some salt of steel, &c., but,” he cautiously observes, “it should be purchased of those who make it their business to have it ready prepared.” “Observe,” he further continues, “that porter should not be sent out without it, as it causes the head so much admired in that liquor, and is agreeable to its flavour.”

Sir J. Sinclair asserts, that “when beer foams much, and makes a head, as it is called, it is a sign either that it has been imperfectly fermented, or that *improper ingredients have been mixed with it*, and consequently, that it must be unwholesome.”*

The author of “*The Domestic Chemist*” remarks: “Beer deficient in malt is deficient in alcohol. When the deficiency is large, the beer is weak. This deficiency is remedied by the introduction of cocculus indicus, opium, extract of poppies, St. Ignatius bean, nux vomica, tobacco, Bohemian rosemary, henbane, all which possess the property of stupifying or intoxicating the persons who swallow them.”

The author of “*The Art of Brewing on Scientific Principles*,” published in London, 1824, gives the following as the standard proportions of the respective ingredients used to one hogshead of beer: “1. *Capsicum Pepper*, in the proportion of half an ounce to one hogshead. 2. *Cocculus Indicus*, one ounce to ditto. 3. *Licorice Juice*, from four to eight ounces, ditto. 4. *Salt of Steel*, a quarter of an ounce. 5. *Sulphate of Iron*, vulgo, copperas, five drachms dissolved, and added just before the porter is sent out, a proportionate quantity for a hogshead. 6. *Colouring*, one and a half pint per hogshead.”

Mr. Morrice enumerates the following articles as those which form part of the stock of a practical brewer. Malt, hops, honey, sugar, molasses, stick-licorice, Spanish ditto, colouring, cocculus indicus, calamus aromaticus, quassia, gentian, coriander, capsicum, caraway seeds, grains of paradise, ginger, salt, salt of tartar, beans (malted), oyster shells, isinglass, and alum.

The following extracts from this author are of too “practical” a nature to be overlooked: of colouring, he remarks, “I should recommend to every brewer to provide himself with a sufficient quantity, as it gives a good face to the beer, and enables you to gratify the sight of your customers. I have tried most colourings, and find them very beneficial in porter and table beer.”—Page 123.

“Cocculus indicus is used as a substitute

* Domestic Chemist, Polytechnic Library; London, 1831.

† Every Man his own Brewer, p. 23.

* Code of Health and Longevity, vol. i., p. 265.

for malt and hops, and is a great preservative of malt liquor; it prevents second fermentation in bottled beer, and consequently the bursting of the bottles in warm climates. Its effect is of an inebriating nature."—Page 123.

"Calamus is used in the brewery as a succedaneum for hops and strength; one pound of which is equal to six of hops."—Page 125.

"Coriander is much used by brewers, to give a flavour to ales. Capsicum is used in ales and amber; it is a good preservative in the summer season."—Page 128.

"Grains of paradise are used in ales, but more frequently in amber beer. They are always ground and used in the tun."—Page 129.

"Oyster shells are very good to recover sour beer, but, when used, you must leave the bung out."

Mr. Accum also remarks, in his work on Culinary Poisons: "To increase the intoxicating quality of beer, the deleterious vegetable substance, *cocculus indicus*, and the extract of this poisonous berry, called black extract, or, by some, hard multum, are employed; opium, tobacco, nuxvomica, and extract of poppies have also been used."

The same author informs us, that the demand for *cocculus indicus* was so great, that in the space of ten years it rose from two shillings to seven shillings per lb.

The active or poisonous principles of these berries is termed by chemists *picrotoxin*, from two Greek words, viz. *πικρος*, bitter, and *τοξικον*, poison. These berries in India, in particular, as well as in this country, are cast on the water, to intoxicate fish, which, when floating on the surface, are readily taken without the aid of the rod or net.

A work of respectable authority affirms, that "that most abominable of all abominations, tobacco, is notoriously used as a substitute for the hop."*

Mr. Roberts, surgeon, in his evidence before a committee of Parliament, states as follows: "I have reason to believe that *cocculus indicus*, grains of paradise, yew-tops, and tobacco, are used to adulterate beer; and I have seen fox-glove leaves among the grains and hops thrown out in one instance."†

The Morning Chronicle, of February 5th, 1841, states, that William Hare, a licensed brewer, in the Old Kent Road, was summoned on an information which charged him with using deleterious ingredients in the manufacture of his beer. One barrel of the defendant's beer, on being submitted to test, "was found to contain vitriol and a preparation of opium."

Three hundred and ten pounds of cop-

peras, and five hundred and sixty pounds of hard multum, that is, black extract, composed of *cocculus indicus*, opium, or some similar poisonous ingredients, were, not long ago, found in the hands of another adulterator, and condemned.

After reading these singular extracts, truly may we exclaim with Mr. Cobbett, "When we know that beer doctors and brewers' druggists are professions, practised as openly as those of bug-man and rat-killer, are we simple enough to suppose that the above-named are the only drugs that people swallow in those potions which they call pots of beer?"*

The evidence already adduced, it is presumed, contains sufficient proof, that, in this country at least, malt liquors are adulterated to a very general and very fearful extent. The existence of this nefarious system is still further proved by the fact, that almost every week convictions take place, and heavy fines are imposed on persons upon whose premises are found the materials used in adulteration. The law on this subject is severe. According to an Act of Parliament (56 Geo. III.), all druggists and others are prohibited from selling or delivering to any licensed brewer, dealer in or retailer of beer, knowing him to be such, any kind of materials used in adulteration, under a penalty of £500. Brewers, dealers in or retailers of beer, are subject to a penalty of £200, on conviction of having used or being in possession of the same articles.

On reference to the minutes of the House of Commons, appointed for examining the price and quality of beer, we learn that between the years 1812 and 1819, of wholesale and retail brewers, publicans, and brewers' druggists, nearly two hundred Excise prosecutions and convictions took place. All of these parties either sold or were in possession of the various articles used in adulteration. Some of them were convicted in penalties of £500 in addition to costs. The cases of conviction, we may with reason conclude, form but a very slight proportion only of those who are actually guilty of this diabolical practice, carried on, as it usually is, in the most cautious and secret manner. The author of "Deadly Adulterations," after stating some of the above facts, adds: "Since that time, seizures of illegal and poisonous articles have been often made by the Excise, and convictions have taken place. During the latter end of the last year, and at the commencement of the present year, seizures have also been made, and convictions have taken place, nearly equal in number to those stated in the text." Mr. Cobbett also makes the following remarks:—"Scarcely a week passes without witnessing the detection of some greedy wretch,

* Green's Bot. Dict., vol. i., p. 715.

† Rep. on Drunk., p. 158.

* Cottage Economy, 1833.

who has used, in making or in *doctoring* his beer, drugs forbidden by law. It is not many weeks since one of these was convicted in the Court of Excise, for using potent and dangerous drugs, by means of which, and a suitable quantity of water, he made two butts of beer into three; upon this occasion it appeared that no less than *ninety* of these worthies were in the habit of pursuing the same practices."

Mr. Wells, an Excise officer, in his examination before a Committee of the House of Commons, states, "that the adulterating ingredients were not kept on the premises,

but in the brewer's house, and that the brewer had a very large jacket, made expressly for that purpose, with very large pockets, and that on brewing mornings he would take his pockets full of the different ingredients. Witness supposed that such a man's jacket, similar to what he had described, would carry quite sufficient for any brewery in England, as to *cocculus indicus*." It may in addition be stated, that a large proportion of these adulterants are prepared in the form of extracts, and occupy therefore but a small space.

The following Return of the Quantities of Articles used in Adulterations, imported and entered for *Home Consumption* during the last Five Years respectively, will add additional weight to the above testimonies:—

	Years.	Quantities Entered for Home Consump- tion.	Amount of Duty Received thereon.	Rates of Duty Charged.
		lbs.	£ s. d.	
Nux Vomica - - -	1829	6862	631 4 2	2s. 6d. p' lb.
			(part damaged)	
	1830	1528	191 0 0	
	1831	2547	290 7 3	
			(part damaged)	
	1832	1477	184 12 6	
	1833	4142	517 15 0	
		Value		
Extract of Nux Vomica -	1829	- - -	- - -	75l. p' cent. ad. valorem.
	1830	£ 2 7s. 0d.	1 15 3	
	1831	- - -	- - -	
	1832	- - -	- - -	
	1833	8 lbs. 12 oz.	4 7 6	Ditto, or 10s. per lb.
Cocculus Indiens - -		lbs.		
	1829	1118	139 15 0	2s. 6d. p' lb.
	1830	2471	308 17 6	
	1831	3541	442 12 6	
	1832	3663	457 17 6	
	1833	4559 ³ / ₄	569 19 5	
Paradise (& Guinea) Grains	1829	13,035	1303 10 0	2s. p' lb.
	1830	18,098	1809 16 0	
	1831	8722	872 4 0	
	1832	16,738	1673 16 0	
	1833	40,411	3191 2 2	
			(part damaged)	

William Irving,
Inspector-general of Weights and Measures.

Inspector-general's Office,
Custom-House, London,
27 June, 1834.

In order fully to substantiate these statements, the reader is requested carefully to peruse the following police report which appeared in the London papers of August, 1841:—

“After the disposal of the night charges on Saturday at the Thames police-office, Mr. Ballantine, the presiding magistrate, called the attention of Mr. Valentine, the inspector of the R Division, to a subject of great importance—the gross adulteration of beer, ale, and liquors, by publicans, to the detriment, the worthy magistrate said, of the health and morals of the people. He wished that the observations he was about to make should go forth to the public and be reported to the police commissioners.—He sat at that court day after day, and had done so for upwards of twenty years, and numerous cases had been under his notice where persons went into public-houses sober, and after drinking one glass of spirits, beer, or ale, became insensibly drunk, not from the quantity but the quality of the beverage served to them. It was well known that a person who was skilled in compounding noxious ingredients for the adulteration of ale, beer, and spirits, was considered in the trade as best qualified for the duties of cellarman and carman, and, indeed, there was little secret made about the matter. There were a few, and but a few, houses where the genuine article was sold as it was received from the brewer or distiller. That morning he had asked a man, who was found by the police in the street in a state of insensibility, how he came to get intoxicated, and he said, with an air of truth, that he had only taken one glass of spirits, and became stupid directly, losing all consciousness. The same answer had been given to his queries on repeated occasions; and from inquiries he had made, and the circumstances of particular cases where strong men had suffered by a small quantity of drugged and adulterated gin or beer, which disordered the stomach and produced nausea, and in many instances produced great suffering to the parties for several days afterwards, he was satisfied that the system must be carried on to a most alarming extent. Seamen and others were often inveigled into brothels, and liquor or ale was sent for, adulterated with noxious drugs for the purpose of stupifying them, and while in that state they were robbed and turned out penniless. He expressed himself thus openly that the public might be aware of a great evil, and that the commissioners of police might be enabled to protect the people against the consumption of spurious liquors, and have the stuff analysed, and proceed against the parties vending it. It was against the tenor of a publican's license to adulterate his beer and liquors, and if a case were made out before him, he would convict in heavy penalties. There

were houses kept open in that district and in other parts of the metropolis during the night, and the beer, ale, and spirits, disposed of to night-walkers and persons out at unseasonable hours, were not only adulterated and of a most nauseous description, but a larger price was demanded for these than the good beer and liquors sold during the day. He was speaking before persons who must know these things as well as himself. He would do all the law enabled him to do; but it was the bounden duty of the police on the part of the public to look after those persons who sold liquors, a small quantity of which made strong men drunk and insane, and impaired their constitutions.

“Mr. Valentine said he could confirm the statement of the magistrate, as far as his knowledge went, and powerful men, who were accustomed to drink considerable quantities of good beer and spirits without being inconvenienced by them, often had their strength prostrated in a few minutes by the deleterious mixtures sold at some of the low public-houses and gin-shops. He would communicate the sentiments of his worship to the police commissioners immediately.

“Mr. Ballantine: And keep your eye on those houses where they sell bad liquors.”

The same nefarious practice of adulteration is practised in the United States. The “New York Sun” for 1838 makes the following thrilling exposure: “Though the public are generally satisfied of the adulteration of our malt liquors, we propose to offer such evidence as will remove all doubts from the minds of the sceptical, if such there yet are. 1. More than one thousand bags of *cocculus indicus* are annually sold at auction in this city; a large proportion of which is purchased by brewers or their agents; the remainder by druggists who re-sell it to the same. 2. Wholesale druggists inform us that their principal customers for this article are brewers; and that it is used only in catching fish, *poisoning rats*, and brewing. 3. We know individuals who are employed by brewers to grind *cocculus indicus* for their use. 4. Various examples of beer have been analysed by Mr. Mapes, a distinguished chemist of this city, who says in his report, ‘It is certain that the specimens analysed contained copperas, common salt, magnesia, copper, and a bitter principle which does not belong to the hop.’”

III. *Adulterations of ardent spirits.*—The adulterations of ardent spirits are, if possible, more extensive than those of either wine or malt liquors. To detail the various processes in common use for this purpose would fill a moderate sized volume. A few examples will, however, be laid before the reader, from sources equally authentic with

those which have already been made use of. The extraordinary value attached to well-frequented spirit establishments is strong evidence of the importance of the traffic. A popular writer observes, that "he has no doubt it will excite much surprise, when he states the fact, (well known to all persons connected with the trade,) that sums of from one thousand to three thousand pounds, and, where wine trades have been attached, as much as from three to six thousand pounds, have been given for the good-will of gin shops, possessed of only twenty-one years' leases, depending solely on the will of the magistrates for their licenses being renewed, and held at rents of from £75 to £200 per annum."* "All surprise, however," he observes, "will cease, when a knowledge is acquired of the profits which the trade affords by means of adulteration."

BRANDY.

Cognac brandy is generally adulterated with Spanish or Bourdeaux brandy, old neutral-flavoured rum, rectified spirits, British brandy bitters, British brandy,† cherry-laurel-water,‡ extract of almond cake, extract of capsicum,§ and extract of grains of paradise, and colouring sugar.

Spirit dealers, like their brethren, wine merchants and brewers, have books for reference which contain specific directions for fraudulent adulterations. Some of these are worthy of notice. "*To improve the flavour of brandy.*—A quarter of an ounce of English saffron, and half an ounce of mace, steeped in a pint of brandy for ten days, shaking it once or twice a-day; then strain it through a linen cloth, and add one ounce of terra japonica, finely powdered, and three ounces of spirits of nitre; put it to ten gallons of brandy, adding, at the same time, ten pounds of prunes, bruised."—"To give new brandy all the qualities of old.—To one gallon of new brandy, add thirty drops of aqua ammonia, (volatile smelling liquor,) shaking it well, that it may combine with the acid, on which the taste and other qualities of the new liquor depend."||

* Wine and Spirit Adulterations Unmasked, 3rd edition, p. 45.

† British brandy, 80 gallons of rectified spirits, 7 gallons of vinegar, 12 ounces of orris root, 15 lbs. of raisins, 2 lbs. of vitriol.—Ibid., p. 12.

‡ Its qualities are highly pernicious and even poisonous.—Ibid., p. 10.

§ Known in the trade by the denomination of "Devil," and made by infusing chiliæ pods in spirit. This is what imparts the appearance of strength and pungent hot taste when taken into the mouth.

|| The Vintners' and Licensed Victuallers' Guide, by a Practical Man; 2nd edition, 1826.

RUM.

The same adulteration is carried on with respect to rum. "The impositions," adds the author of the work before referred to, "practised with rum, generally consist in purchasing low-priced Leeward Island rum, and by the introduction of the undermentioned articles in certain proportions, vending it as fine old Jamaica rum, of peculiar softness and flavour:—ale, porter, shrub, extract of orris root, cherry-laurel-water, extract of grains of paradise or capsicum."*

GIN.

The list of ingredients used in flavouring or making up gin, as advertised, is somewhat startling; not less for its length, than for the articles of which it is composed. They are as follows:—*Oil of vitriol, oil of cassia, oil of turpentine, oil of carraways, oil of juniper, oil of almonds, sulphuric æther, extract of capsicums, or extract of grains of paradise, extract of orris root, extract of angelica root, water, sugar,*" &c.†

The above multifarious list would lead individuals to look upon the establishment of the distiller or spirit-seller as a chemist's laboratory, where the operations of chemical science were conducted on an extensive scale. The art of adulteration, however, demands considerable skill and ingenuity. The flavour and taste of the genuine liquors require to be imitated with great minuteness and tact.

In the adulteration of gin, the oil of vitriol forms an essential combination. This destructive ingredient, indeed, imparts that pungency to the taste as well as smell, which is so peculiar to common gin. "Hence it is, that, in smelling a bottle containing gin, in the flavouring of which oil of vitriol has been employed, the pungency is so great, immediately after the bung has been taken out, as almost to make the eyes water, which is never the case, even with gin at its highest strength, previous to its being sweetened."‡

This intelligent author remarks, that there is every reason to believe that it is used in the greatest proportions to such gins as are reduced to the lowest strength. He states, also, that previous to being mixed with other flavouring ingredients, it is altered in its form by being mixed either with sour cider or lime-water, under which alteration it is added in the proportion of from one to four pints to one hundred gallons of gin.§ About one-eighth of a pint of the oil of turpentine is used in

* Wine and Spirit Adulterations Unmasked, p. 35.

† Ibid., p. 50. ‡ Ibid., p. 51. § Ibid., p. 52.

the adulteration of one hundred gallons of gin. Half a pint of sulphuric æther is employed for the same quantity. They are intended principally to conceal the oil of vitriol in the made-up gin, and to give it what is called "a delicate flavour."*

The other materials serve to impart the requisite degree of fulness in the taste and flavour necessary for the sale of this noxious compound; the principal object being to prepare a fiery liquid which will satisfy the artificial desires of the drunkard's appetite.

The adulterators of gin in general prepare a "heading," of which the following appears to be the common recipe:—"Take of oil of vitriol about one dessert spoonful, one ditto of common oil of almonds, mix them well with a portion of spirits of wine, and add the whole to one hundred gallons of made-up gin."

The following are examples of the mode of adulterating gin, as found in "The Vintners' and Licensed Victuallers' Guide, by a practical Man," second edition, 1826; and "Palmer's Publicans' Director," second edition, 1826: "Take one hundred gallons of unsweetened gin, three pounds of coriander seeds, four ounces of bitter almond cake, three ounces of orange peel, two ounces of angelica seeds; cassia, one ounce; orris root and capsicums, of each half an ounce, steep the seeds, &c. (first bruised) in a portion of gin for six days, strain and press them out, and add the rest; then add eighteen pounds of lump sugar. Fine with one pound of alum, and four ounces of salt of tartar, dissolved in water."

"To make up thirty gallons of raw spirit into cordial gin, get as follows: two pennyweights of oil of turpentine, three pennyweights of oil of juniper berries, two pennyweights of oil of vitriol, two pennyweights of oil of almonds, one pint of elder-flower-water; kill the oils with a pint of spirits of wine, and add about eight pounds of loaf sugar, twenty-five gallons of spirits, one in five, which will bear five gallons of water; rouse it well, and in order to fine it take two ounces of alum, and one of salt of tartar; boil it till it be quite white, then throw it into your cask, continually stirring it for ten minutes, bung it up, and when fine it will be fit for use."

The author of the work from which quotations have been so copiously made, in proof that adulterating materials are used in the preparation of common gin, says that this fact "is proved beyond all question by the following simple calculation. It requires forty-eight gallons of water to reduce one hundred gallons of gin, purchased at its

cheapest rate, to one of the prices at which it is advertised (that is 6s. 6d. per gallon), and the still further addition of forty-four gallons more of water (making a total of ninety-two gallons), to allow of the profit of 1s. 6d. per gallon."*

The author of the "Art of Brewing on Scientific Principles," which has been before referred to as a respectable publication, makes the following statement;—it may be premised that this work was published in 1826: "Spirits vended by retail are all adulterated, and some of them to a dreadful extent. Some months since a person having writing to do that would occupy great part of the night, purchased at a liquor shop in Newgate-street half-a-pint of gin, and during the night he drank a goblet full of grog, which he had made from it; he was seized with most excruciating agony, spasms of the stomach, temporary paralysis, and loss of intellect; these he attributed to some natural cause, and he gave the remainder of the liquor to a person that called on him in the morning. In about an hour that person was similarly affected. This induced inquiry; and it was ascertained, that the woman who served the liquor had mistaken the bottle, and had sold half-a-pint of the fluid intended to prepare the adulterations for sale. The last-mentioned person who partook of the infernal mixture died of its effects."

The evidence brought forward in this chapter indisputably proves the general practice of adulterating intoxicating liquors to a most dangerous and alarming extent. The various authors from whose works quotations have been made are unanimous in their testimony of the existence of this nefarious practice. Many of these proofs are extracted from books actually published for the direction of the adulterators, and contain specific directions for the adulteration of each liquor. This is done in the most deliberate manner, and totally regardless of the fatal consequences which must inevitably result from so injurious a practice.

That the beer sold at inferior houses is very much drugged, is proved from the stupefying effects it has on its wretched consumers. The appearance of these poor creatures is piteous indeed. Their haggard countenances and stupefied features excite the strongest emotions of pity and disgust.

The practice of adulteration has, at various times, been defended as not being so injurious as is commonly represented. The quantity of drugs used is stated to be so small as to prove comparatively harmless. This defence is, on the face of it, weak and fallacious. The facts also which have appeared before the public indisputably decide

* Wine and Spirit Adulterations Unmasked, p. 52.

* Wine and Spirit Adulterations Unmasked, p. 55.

to the contrary. Several fatal cases, resulting from the practice, have already been advanced, and, no doubt, great numbers of others might be traced to the same cause.—In a review of the facts presented in the last annual report of the Hanwell Lunatic Asylum, extracts from which are given in a previous section, there occurs the following alarming passage: “We have, moreover, reason to believe, that the drugs with which the ordinary kinds of gin, as well as malt liquor, are universally adulterated, have greatly tended to this melancholy result;” that is, the recent increase of insanity.* A popular writer remarks, that “it is, no

doubt, to the unprincipled adulterations of food, spirits, malt liquors, &c., that a great number of sudden deaths, which are constantly happening, in and about the metropolis, is assignable. The adulteration, it is true, is not sufficient to cause instant death; but it operates slowly, and silently, and imperceptibly, so as not to excite sufficient suspicion and inquiry respecting the cause. This is not an idle or a random remark, but one founded on much observation, and on very probable grounds. It is hoped that it will awaken public attention and inquiry respecting these nefarious transactions.”*

* Facts and Figures, No. 4, p. 61.

* Oracle of Health and Long Life, p. 31.

DIVISION THE FIFTH.

SECTION I.

MEANS EMPLOYED IN VARIOUS AGES AND COUNTRIES
TO REMOVE INTEMPERANCE.

"Almost every legislator of the world, from whatever original he derived his authority, has exerted it in the prohibition of such foods as tended to injure the health and destroy the vigour of the people for whom he designed his institutions."—JOHNSON'S DEBATES.

"The great instructor of the Jews, who delivered his laws by divine authority, prohibited the use of swine's flesh, for no other cause, as far as human reason is able to discover, than that it corrupted the blood, and produced loathsome diseases and maladies which descended to posterity; and therefore in prohibiting, after his example, the use of liquors which produce the same effects, we shall follow the authority of the great Governor of the Universe."—IBID.

THE evils of intemperance have been variously estimated at different periods of the world. In times of primitive simplicity, great caution was observed in regard to the use of intoxicating liquors. The virtuous feelings of society, however, gradually gave way before an increasing appetite for luxurious gratification. The regulations of the state, even in our own enlightened country, bear the stamp of proportionate deterioration, and more or less harmonize with the depraved morals of the age. Such has been the general experience of mankind, in regard to those national laws which have reference to intemperance. They bear an exact relation to the general estimation in which intoxicating liquors are held, and accordingly will be found, in their general character, to correspond with the virtue and morality, or vice and intemperance, of the age and country which produces them.

The manners and customs of the Jews will be dwelt upon at considerable length in succeeding sections; it is unnecessary, therefore, to allude to the habits of that remarkable nation, further than by stating, that the temperate practices of other nations of antiquity appear in a great measure to have been derived from the regulations of the Jewish economy.

The records of Persian history present striking illustrations of the advantages derived from temperance, as well as the pernicious consequences of indulgence in luxurious and intemperate habits. The

Persian nation in its days of simplicity set an example of temperance and sobriety to surrounding nations worthy of universal imitation. Their children were trained up professedly with the design to benefit the state, and to promote the general welfare of the community. As an essential means to secure this object, they were early taught to practice abstinence and self-denial.

The History of Cyrus abounds with illustrations of this fact. From the earliest period he was trained in the temperate habits of the people among whom he was born; and when arrived at more mature age, he refused to depart from the frugal practices of his early years. The same self-denial was enjoined upon his soldiers. By this means he accomplished the mighty achievements for which his name has been so conspicuously handed down to posterity. Cyrus lived to an advanced age, possessed of all the vigour and advantages of youth, and in the enjoyment of the immense possessions which he had acquired by his successful and victorious career.

The Persians, in their primitive state, refrained from the use of wine, except at festive entertainments. Even on those occasions the excessive use of it was interdicted by the law. "It was provided for by law," remarks Xenophon, "that no pitchers, or large wine vessels, should be brought in at entertainments, as being sensible that, if they kept from drinking too much, their constitutions, both of body and mind, would suffer less."*

The records of Egyptian history afford us but scanty information in regard to the drinking habits of the people of that country. Prior to a particular period in their history, the use of intoxicating wine was looked upon as unlawful, and consequently prohibited. The simple juice of the grape, however, or unfermented wine, was in use at an early period. Until the accession of Psammeticus, the kings of Egypt, who held the sacred office of priests, abstained altogether from the use of intoxicating wine. This monarch flourished about six hundred and forty years before the birth of Christ. He probably acquired a fondness for wine during his abode with the Syrians, to whom he fled for protection when his dominions were invaded by Sabacus, king of Ethiopia.

* Cyclopæd., lib. viii.

Plutarch, however, on the authority of Hecataeus, informs us that the quantity of wine used by this king and his successors was definitely prescribed. Diodorus Siculus also affirms the same fact. The Egyptians, he remarks, prescribed even to their kings a stinted measure of wine at their meals; so much indeed as would refresh, but not inebriate.* It is probable that this law was enacted by Bocchoris, one of the kings of Egypt, who flourished before Christ, 766, and was contemporary with Uzziah king of Judah.

The Romans, during the first ages of their national existence, were exceedingly simple and temperate in their manners. The vice of drunkenness was unknown to this people during the existence of the republic. Wine did not come into general use, nor indeed was the vine cultivated, until about six hundred years after the foundation of the commonwealth. This statement is made on the authority of Pliny, who also informs us that the primitive libations of the Romans consisted of milk and other offerings of like simplicity. Numa, the immediate successor of Romulus, made a law, which, on account of the great scarcity of wine, directed that no man should sprinkle the funeral pile with it.† Lucius Papyrius, previous to his engagement with the Samnites, made no other vow than that he would, in case of victory, offer to Jupiter a small cup or goblet of wine.‡

The regulations of the Romans at this period, in relation to the use of intoxicating liquors, were exceedingly severe, and rigorously enforced. "Amongst the Romans," remarks Ælian, "it was a strict law that no woman (bond, or free,) should drink wine; nor any male until he had attained to the age of thirty-five years."§ Athenæus makes a similar statement, except that, in the latter instance, the period fixed was thirty years, instead of thirty-five, as stated by Ælian.|| The regulation, in relation to women in particular, was strictly enforced. It had its origin as early as the age of Romulus. Balduinus, however, states that the Latian women, who existed at a period prior to the building of Rome, were exceedingly abstemious. Fatua Fauna, the sister and wife of Faunus, was scourged to death by her own husband for drinking off a large pot of wine.¶ The law of Romulus enacted: "*Si vinum (mulier) biberit, domi ut adulterum puniunt.*"** The husband, in fact, in conjunction with his relations, might punish the wife at home, amongst themselves, with the same severity as if she were discovered

to be an adulteress. Dionysius Halicarnassensis thus states the reason of this enactment: "Romulus deemed it proper to punish both these, as the greatest crimes that women can be guilty of, with consideration of their sex. He looked upon lewdness as the first step to all sorts of insolence and disorder, and drunkenness as the grand incentive to lewdness."* Valerius Maximus fully corroborates the preceding quotation. Wine, he asserts, was forbidden to women, lest by its use they should fall into some extravagance. *Vini usus olim Romanis faminis ignotus fuit, ne scilicet in aliquod dedecus prolaberentur.*† Near relations were permitted to salute females when they came into their houses, in order to smell whether they had tasted any *temetum*, the name by which at that period they distinguished wine. On conviction, the guilty woman received the punishment of adultery, in other words, death. Ignatius Meecenus killed his wife on the discovery that she had been drinking wine, without even the formality of consulting with his relations. He was pardoned for this act by Romulus, in whose reign it occurred. Pliny and Valerius Maximus both attest this circumstance.‡ They not only relate the particulars of the case, but give the reason why the husband was acquitted of murder. Fabius Pictor, in his Annals, states that a Roman lady was starved to death by her own relations for having picked the lock of a chest in which the keys of the wine cellar were deposited.§

This exclusive legislation is not confined to the primitive Romans. The inhabitants of the Island of Otaheite intoxicate themselves by means of juice expressed from the leaves of a plant which they call *ava ava*. "They keep," remarks a modern writer, "this intoxicating juice with great care from their women."||

The Roman Censors were magistrates¶ appointed to inspect the morals of the citizens, and were entrusted with power to expel out of the senate, or take away a horse from any man who gave himself up to sensual pleasures, such as debauchery and intemperance.** Alexander ab Alexandro thus refers to this power: "The ancient Romans so much hated drunkards, that their Censors turned them out of the senate, and branded them with legal infamy, as unworthy to bear public honours and offices. They thought it scandalous that men of drunken morals, and (thereby) broken constitutions, and such as were noted for lewdness, should be admitted to any trust in the government, or to consult upon affairs

* Diod. Sic., lib. i.

† Plin. Hist. Nat., lib. xiv., cap. 12.

‡ Ibid., lib. xiv., cap. 13.

§ Ælian, Var. Hist., lib. ii., c. 35.

|| Athenæus, lib. x., c. 7.

¶ Balduinus in hanc legem Romuli.

** Ibid., ad leges Romuli.

* Dion. Halicarn., lib. ii., cap. 25.

† Val. Max., lib. ii., c. 1.

‡ Plin. Hist. Nat., lib. xiv., c. 13; Val. Maximus, lib. vi., c. 3.

§ Pliny, b. xiv., c. 13.

|| Hawkesworth's Voyages, vol. iii., p. 39.

¶ Alex. ab Alex., b. iii., c. 11.

** Plutarch. in Catone Maj., et in P. Amilio.

which related to the commonwealth." Under the first emperors intemperance was a vice to which women as well as men were equally addicted. Pliny complains in bitter terms of the drunken practices of females in his time.

The Greeks, like the Romans, during the earlier and more prosperous part of their career, were temperate and sober in their habits. In course of time, however, the temperance of the primitive Greeks sunk under the insinuating advances of luxury and intemperance.

The most prominent of the institutions established among the ancient Greeks, for the promotion of moral principles and temperate habits, were dominated *διδασκαλεῖα σωφροσύνης*, *schools of temperance and sobriety*. A great number of individuals assembled and partook of a frugal and temperate repast provided for that purpose by general contribution. On these occasions the persons present profited by the example and discourse of the elders of the place. The wines used at these banquets were not only greatly inferior in potency to the wines of the present day, but were invariably mixed with water. One of their laws, in reference to these entertainments, enacted that "none but mixed wines should be drunk at banquets."* The Areopagite was commanded to take cognizance of all drunkards.† These inspectors of public morals were held in great respect among the people. They were empowered to examine into the lives of all the members of the community, and to punish those who were irregular in their manners, as well as to reward the virtuous and circumspect. The senate and court of the Areopagus, according to Aristides, was *τῶν ἐν τοῖς Ἑλλησι δικαστηρίων τιμιώτατον καὶ ἀγιώτατον*, *the most sacred and venerable tribunal in all Greece*. Such Archons were admitted into this select body as had behaved correctly in the discharge of their trust, and were irreproachable in their private conduct. To have been sitting in a tavern or public-house was a sufficient reason to deny an Archon admission into it.‡ This dignity was continued to them during the whole of their lives. If any of the senators, however, were convicted of immoral conduct, they were presently expelled without mercy or favour.§ The law in relation to Archons was exceedingly severe. "An Archon that shall be seen overcharged with wine shall suffer death." *Τῷ Ἀρχόντι ἂν μεθύων ληφθῇ θάνατον εἶναι τιωξήμιην*. This law was enacted by Solon the famous lawgiver.||

In Athens taverns were held in much disrepute. Isocrates informs us that no person, not even a servant, who pretended to any

regular morals, durst be seen to eat or drink in such houses. *Ἐν κατηλειω δὲ φαγεῖν ἢ πίνειν ὀδεις ὁδὸν οἰκετὸς ἐπιεικὲς ἐτολμήσε.** Towards the decline of Grecian morals, these rigorous precautions in regard to their public magistrates became less observed. Men of loose lives and mean fortunes, as well as persons of high quality and strict virtue, were admitted to that office; from thence may be dated the decline of their national prosperity. The Spartans or Lacedæmonians, according to Plato and Xenophon, looked upon intemperance with great detestation; their laws had special reference to the enforcement of temperance and sobriety. Plato, in his celebrated code of laws, represents Megillus, a Lacedæmonian, as uttering the following language: "That by which men chiefly fall into the greatest luxuries, insolence, and all sorts of moral madness, *our* laws have effectually rooted out of our country. You shall, neither in villages nor towns belonging to the Spartan state, see any such things as *drinking clubs*, or the usual consequences of them. Nor is there any man who should find another that had drank to excess and would not presently bring him to severe punishment, even the festival of Bacchus would be no pretence to excuse him."† Xenophon makes the following observations in regard to the Spartans: "They prohibited all unnecessary tipplings, which do mischief to the mind and body, and suffered no person to drink but when natural thirst required it."‡ Plutarch relates that the Spartans were in the habit of exhibiting their slaves, or helots, in a state of drunkenness to their children, in order to excite in them a disgust of vinous indulgence. *Τοῖς παισιν ἐπεδεικνυοντας Εἰλωτας μεθύσαντας εἰς ἀποτροπὴν πολυοινίας.*§

The laws of Plato are also worthy of consideration. "First," he observes, "let children taste no wine at all to the *eighteenth* year of their age; from thence till they be *thirty*, young men may use it, but with moderation, abstaining entirely from drunkenness, and, indeed, from drinking *much* wine.||" When they attain their fortieth year, he allows them to attend feasts, and to make a freer use of wine, which he looks upon as *ἐπικερὸν τῆς τὴ γῆρας αὐστηροσύνης*, "very proper to qualify the austerities of men in years." This, however, must be done with due regard to laws and good order, as men that are careful to preserve sobriety; the company they associate with must be select, and the times of relaxation suitable, and not to interfere with such business as may require their prior attention.

The laws of most of the other nations of

* Alexis Æsopo.

† Athenæus, lib. vi.

‡ Ibid., lib. xiv.

§ Potter's Archæologia Græca, vol. i., p. 122.

|| Diog. Laert. in Solone, l. i., sec. 57.

* Isocr. Areopag., p. 354.

† Plato de Legib., lib. i.

‡ Xenophon de Rep. Laced., c. v., sec. 4.

§ Plutarch in Instit. Laconicis.

|| Plato de Legib., lib. ii.

antiquity contain severe enactments against intemperance. The Indians, according to Strabo and Alexander ab Alexandro, held it unlawful to drink wine on any other occasion than at their sacrifices. If a woman killed their monarch in a state of drunkenness, she was rewarded by marriage with his successor.*

Soldiers, while engaged in military service, by a law of the Carthaginians, were prohibited the use of wine. Male and female servants were also denied the use of strong drink under severe penalties. Μηδεποτε μηδενά επι στρατοπέδῳ γενεσθαι τῆς τι ποματος (οινῆ) ἀλλ' ὑδροποσία συγγιγενεσθαι τῆτον τον χρονον ἀπαντα. Καὶ κατὰ πολιν μητε δαλον μητε δαλην γενεσθαι μηδεποτε μηδε Ἀρχοντας τῆτον τον εναντον ον αν αρχωσι, μηδ' αν κυβερνητας, μηδε δικαστας ενεργως οντας, οινῆ γενεσθαι τοπααραπαν.†

Zaleucus the Locrian, according to Athenæus, made it death for any man to drink wine unmixed with water, unless prescribed by a physician for the benefit of his health.‡ Zaleucus, in order to restrain luxury, enacted the following singular law: "No free-born woman, when she went abroad, was to be attended by more than one handmaid, *unless she were drunk*; no such woman, moreover, was permitted to walk out under night, *unless with an intention to play the harlot*." This law was eminently successful in its results, for, observes Diodorus Siculus, lib. xii., none were willing to expose their characters to derision or contempt, by acknowledgment of such moral transgressions.

Among the Massilians and Milesians, women at any age were interdicted from drinking wine; they are to restrict themselves to the use of water.§ An excellent authority informs us that this law was intended to preserve the purity and chastity of their inclinations; wine being known to be a great incentive to lewdness.||

The laws of Draco, which, from their severity, were said to be written in letters of blood, punished drunkenness with death.

Lycurgus, king of Thrace, alarmed at the intemperance which existed amongst his people, commanded all the vines in the kingdom to be totally extirpated.¶

About the year 704, a like measure was enforced by Terbaldus, a Bulgarian prince. The Avars, whom he had conquered, by their own confession, among other vices, had been ruined by intemperance. Their magistrates had neglected to exercise a due authority to prevent this evil. On arriving at his own kingdom, Terbaldus, as a certain preventive of the vice of drunkenness,

issued a command to extirpate all the vines.*

The Franks, under the wise government of Charlemagne, or Charles the Great, had numerous regulations on the subject of intemperance. This celebrated warrior himself practised the virtues he so strongly recommended to others. "No person need wonder," observes Baluzius, "that so great a prince as Charlemagne took care to admonish his subjects against drunkenness; for he himself (as *Eginhard* relates) was temperate both in eating and in drinking, but most of all so in the latter; being one that had an aversion to drunkenness in any man whomsoever, and much more abhorred it in himself and those about him."† In a constitution which he made at the General Diet, at Paderborn, A.D. 777, in favour of his nobility, after conferring upon them some valuable privileges, he gave them the following caution: "Take care that this eminence of rank, and these high privileges which you have merited and obtained as the reward of your valour, be not sullied by drunkenness, scurrility, or any vice; lest what was intended to do honour to you redound to punishment; which, if ye be guilty of such excesses, shall be inflicted upon you: and this right of punishing you for them we reserve perpetually to ourselves and our royal successors."‡

The same restrictions were laid upon his soldiers, whom he directed "not to persuade or command their brother soldiers or any one else to drink." *Ut in hoste memo parem suum, vel quemlibet alterum hominem bibere roget, (al. coget.)*§

These prohibitory mandates extended to all classes of society. The elder part of the community, in particular, were commanded to abstain from drunkenness, that they might set a good example of sobriety to the young persons.|| The following law in regard to intemperance was enacted either by Charles or his son Lewis:—"We command that the great evil of drunkenness, the root of all other vices, be avoided with the utmost care. He that will not avoid it, we do decree, shall be excommunicated, till he give satisfaction that he will reform. *Qui autem hoc vitare noluerit, excommunicandum esse decrevimus, usque ad emendationem congruam.*"¶

Most of the laws of Charlemagne were directed in the most severe terms against all the temptations to intemperance, such as tippling, and compelling and persuading others to drink. Goldastus remarks, *Ebrieta-*

* Strabo, l. xv., Alex. ab Alex., l. iii., c. 11.

† Plato de Legib., lib. ii.

‡ Athenæus, lib. x., cap. 7.

§ *Ælian*, Var. Hist., lib. ii., cap. 38; Athenæus, lib. x., cap. 7.

¶ *P. Hendreich*, Massilia, apud Gronov., vol. vi.

¶ *Plutarch*, de aud. Poetis.

* Bonfinius de reb. Ungaricis, decad. i., lib. i.

† Baluz., tom. ii., Not. in Libros Capitular., col. 1173, v. Ebrietate.

‡ Const. de Privil. Nobilium, sec. iii.—Goldast., tom. iii.

§ Capit. ii., A.D. 812, c. vi., Baluz., tom. i.

Capitular., i., c. 161.

¶ Addit. iii., ad Capitular., c. 36.

*tem inhibuit, neve alius alii propinaret.**—Charles not only prohibited drunkenness, but the drinking of healths in company. The latter practice has ever been a precursor of the former.

The Anglo-Saxons, had a curious regulation in relation to drinking. It was enacted by Edgar, and was intended to restrain immoderate vinous indulgence.—Their drinking cups were required to have golden or silver nails or studs perpendicularly affixed to their sides, at stated distances, so that each person, when the vessel was handed round, might know his exact measure, and neither drink himself, nor oblige others to drink beyond it. Brompton† and Selden,‡ distinctly allude to this law.—They leave us in the dark, however, as to the number of cups which might be taken without some restraint, on which point, the law in question could not, as indeed history informs us it did not, effect much benefit in the way it was intended.

The canons of Archbishop Anselm, made in the council of London, A.D. 1102, contain an order in which priests are enjoined not to attend drinking bouts, nor *to drink to pegs*. The common expressions, “he is in a merry pin,” and “to take a person a peg lower,” most probably originated in this singular practice.

The laws of the ancient Welsh and Scotch contain strong injunctions against intemperance, and in particular in reference to those who held important stations in society. An ancient Welch enactment enjoins sobriety among the three principal professional branches of society. If an injury was done to them while in a state of drunkenness, they could not obtain legal redress for it.—Judges were always to be in such a state as to administer justice; the clergy in a fit condition to communicate the sacrament; and physicians always to be prepared to attend to the duties of their profession.§ In another copy of the same law, in the collection of Sir H. Spelman, it is added, that the Secretary of State, who is denominated *Sacerdos Curiae*, was never to be in a state of inebriation, that he might always be in readiness to receive and send out public despatches.||

The writings of Hector Boetius sufficiently show the severity of the Scottish laws in reference to the subject under consideration, and the utter detestation in which, in ancient times, that nation held drunkenness. Laws for the suppression of luxury were enacted at Scone, A.D. 861, by King Constantine the Second. One of these commanded young persons of either sex to abstain entirely from the use of in-

ebriating liquors. Death was the punishment on conviction of drunkenness.*

The laws of the ancient Scots, in relation to those who kept houses for the sale of drink, were peremptory and severe. These individuals were regarded as persons, who, unhappily for the interests of the nation, made provision to indulge the pleasures rather than the necessities of mankind, and who generally enticed men to a debauched and vicious life.† It is said that Argadus, Administrator of Scotland, A.D. 160, confiscated their goods, pulled down their houses, and banished the men. Constantine the Second also is said to have made a law, by which their houses were to be destroyed, and themselves banished. If they did not submit to this law, they were to be hung.‡ The same lawgiver also decreed, that all persons who held a magisterial or other public post should abstain from all inebriating liquors. An infringement of this law was visited with death.§

At a more recent period, a proclamation of the town council, containing an abbeviated of the Acts of Parliament made against profaneness and vice, enacted severe penalties to those who “drank to excess.” Each nobleman who committed this excess was liable to a penalty of £20 Scots; each baron to twenty merks; each gentleman, heritor, or burgess, to ten merks; each yeoman to forty shillings; each servant to twenty shillings, Scots, *toties quoties*; ministers forfeited a fifth portion of their year’s stipend.

Drunkenness in youth among the ancient Mexicans was also deemed a capital crime. Even in advanced years it was punished with great severity. In the case of a nobleman, it incurred not only forfeiture of office and rank, but entailed infamy on its unfortunate subject.

An ancient law of Spain decreed, that if a person of rank was convicted, even of a capital offence, he should be pardoned on pleading, in extenuation, that he was drunk at the time of its perpetration. It was taken for granted, that any one who laid claim to the character of a gentleman would rather suffer death than confess himself guilty of so degrading a vice.

The history of eastern countries, perhaps, presents us with the most remarkable and successful attempt, on record, to do away with the evils of intemperance. This observation applies in particular to those

* Goldast., tom. i.

† Brompton’s Chronicle, col. 869.

‡ Selden, Analecta, l. ii., c. 6.

§ MS. Mert., fol. 52.

|| Spelm. Conc., i., p. 459.

* Hect. Boet., lib. x. Adolescentes—ab omni inebriante penitus abstinerent. Si adolescens, puer aut puella, inebriaretur, id illi capitale foret.

† Lixas, Cupediarior, Popinones, similique hominum genus, ad mortalium voluptatem, magis quam necessitatem, malo genio paratum, ad delicias contra patrium ritum alliciens, citans, impellens, publicatis fortunis, dirutisque ædibus, proseripsit.—HECT. BOET.

‡ Hect. Boet., lib. v., et l. 10.

§ Ibid., lib. v., fol. 79.

districts whose inhabitants strictly are the followers of Mahomet.

The Mahometan prohibition from wine is stated, on good authority, not to have originated with the prophet, but to have been taken from a sacred book called the *Tualim*. The author of this learned book gives the following singular reason for its enactment; it is, however, known only to the learned doctors of the religion of the Koran: Two angels, the one called Arot, and the other Marot, were sent, in preference to all others, to govern the world, with express orders not to drink wine. A difference happening to arise between a husband and wife, who previously had lived together in the greatest harmony, the latter, who was desirous to regain the affections of her husband, imagined that she could easily accomplish so desirable an object by the mediation of the two favourites of heaven. She accordingly invited them both to her house, where they were received with every mark of distinction. Wine was presented to them in a cup, which they were not able to refuse from the beautiful hands that offered it. "It is not," remarks the writer from whose work this narration is taken, "very excusable in celestial beings to become mortal for the sake of a fine woman." They tasted of the liquor, which appeared to them so delicious in its nature, that they drank too much of it; so that becoming inflamed, and even intoxicated by it, they were desirous to repay their kind hostess by certain marks of attachment, which, remarks the same writer, are in general more used by lovers than by husbands. The woman, being faithful and chaste, was much embarrassed and concerned to get out of this dilemma. Under a pretence of curiosity, however, she asked the two messengers what words they made use of to procure a return to heaven. One weakness generally leads to another, and the angels disclosed to her their important secret. The woman instantly profited by their disclosure, and ascended to the throne of the Eternal, where, in a suppliant tone, she exposed her complaint, which was heard with justice. The Father of the Universe did even more, for this pure soul became a radiant star, and the unfaithful angels were tied by the feet with chains, and precipitated into the well called Babil, where the Mahometans believe they will remain until the day of judgment. The Almighty on this account prohibited the use of wine to all his servants for ever.*

In the Koran, however, the prophet attributes this prohibition altogether to the broils which wines and games of chance had occasioned among his followers. "The devil desires to sow dissensions and hatred among men, through wine and games of

chance; be obedient to God, and the prophet, his apostle, and take heed to yourselves." Mr. Sale and Sienr de Ryer both agree in opinion, that Mahomet commanded this prohibition in consequence of these disturbances and quarrels, combined with the neglect of religious duties, which the use of wine occasions. Mr. Sale's words are,—"Because the ill qualities of wine surpass its good ones, the common effects thereof being quarrels and disturbances in company, and neglect, or, at least, indecencies, in the performance of religious duties."

The less learned among the Mahometans attribute this celebrated law to the following circumstance: "One day Mahomet, passing through a village, remarked that the inhabitants were celebrating some festival with great joy. Having ascertained that a wedding and wine were the causes of this mirth, the prophet, in his wisdom, judging that pleasure was the soul of life, conceived a great fondness for that liquor, which enchanted the senses, by making men forget their miseries. On passing, however, the next morning through the same place, Mahomet saw the earth drenched with human blood, and soon learned that the guests, having become mad by their excessive use of wine, had attacked each other in the most cruel manner, and some of them had been killed, while the greater part were covered with wounds. The prophet, like a wise man, now saw reason to change his former hasty opinion, and determined to have nothing to do with a pleasure the end of which was so bitter and destructive."*

Abulfeda assigns another reason for the prohibition, in his account of the prophet's night journey to heaven. The angel Gabriel presented to the prophet three cups, one of which contained wine, the other milk, and the third was filled with honey. Mahomet made choice of the milk, after which he heard a voice, which said, "Thou hast made a lucky choice, Mahomet, since, hadst thou drank of the wine, thy nation would have deviated from the right path, and, consequently, in their enterprizes, have proved unsuccessful." These facts sufficiently show that this celebrated enactment had its origin in motives of policy on the part of Mahomet, who foresaw that he would not succeed in his schemes of aggrandizement if his followers were enervated by the pernicious influence of wine. The nature of the climate in Arabia rendered the use of alcoholic stimulus peculiarly dangerous, and those who were accustomed to indulge in it were continually liable to excesses and breach of discipline.

Some of the more pious Mahometans consider it unlawful not only to taste wine,

* Maritis' Travels, vol. ii., p. 147.

* Maritis' Travels, vol. ii., p. 149.

but to press grapes for the making of it, to buy or sell it, or even to maintain themselves with the money arising from the sale of that liquor. A writer of great authority asserts, that some Mussulmans are so strict in regard to the same point, that they will not call wine by its true name, lest by that means they should offend against the laws of the prophet, while some of the Arabian princes have been so scrupulous as even to forbid the bare mention of it.

Some strange anecdotes are told of the Mahometans endeavouring to reconcile their consciences with indulgence in wine. "A Turk," says Burton, "being to drink a cup of wine in his cellar, first made a huge noise and filthy faces to warn his soule (as he said) that it should not be guilty of that foule act which he was about to commit."*

The Rev. Mr. Southwell, in his recent work, corroborates these statements: "The Turkish code of jurisprudence," he remarks, "specifies that a true believer must not take a drop of the accursed fluid, nor use it as a remedy, internally or externally, either for himself, his children, or his cattle; and that he must use no vessel in which wine has been kept, unless the vessel is composed of material which will not imbibe the liquor, and even in that case it must be purified by washing it ten times with pure water. The civil polity of Mahometan nations is based upon their religion; and a religious offence is, under Mahometan governments, a crime against the state. The sin of wine-drinking is as much a subject of legislation as murder, and is equally subjected to the cognizance of the judicial tribunals. To convict of drunkenness it is enough for the offender to have taken a single drop of wine; but, if he is charged with having swallowed any other intoxicating liquor, actual intoxication is required. The distinction being founded upon the fact, that while wine is expressly forbidden in the Koran, the prohibition of other intoxicating drinks is only implied. The penalty in both cases is the bastinado: eighty blows for a freeman, and forty for a slave. In one instance, only, the punishment is more severe. Drinking wine openly during the Ramazan is a capital crime, and the penalty is death. In this case the offence is trebly aggravated: by drinking wine the law is broken; by drinking it during the Ramazan the fast is violated; and by drinking it openly, a great scandal is created."

The learned Abbe Marigny relates the following anecdote of the Caliph Mahadi, or Almohadi, a sovereign who flourished about the 785th year of the Christian era: The prince, on one occasion, when hunting, having lost his company, urged by feelings

of hunger and thirst, and greatly fatigued, entered the cottage of an Arabian peasant, and asked him for something to eat and drink. The Arab set before him a brown loaf, and a little milk. On Mahadi desiring the peasant to give him something better, a pitcher of wine was forthwith brought, of which the caliph took two draughts. Mahadi then inquired of the man whether he knew who he was. The Arab replied in the negative. "I am," said the prince, "one of the chief lords of the caliph's court." He then drank again, and after put the same question to the peasant. The Arab answered that he had but just told him. "Well," replied Mahadi, "but I am a greater man than I said I was;" and thereupon he took another draught and repeated the question. The Arabian now grew angry, and replied, "He thought he had sufficiently explained himself on that subject." "Well," said the prince, "but I have not told you all; I am the caliph, before whom all men fall prostrate." At these words the poor Arab, instead of falling down on his face, hastily took up his pitcher, and carried it away. The caliph, in amaze, inquired why he acted in this manner. "Why," said the peasant, "if you had drank once more I should have feared you would have been the prophet; and that if you had taken a finishing draught you would have attempted to make me believe you are God Almighty himself." The caliph could not avoid laughing at the peasant's answer. His attendants, who had long been in search of him, having found him at the house, he related to them his adventure, and ordered a vest and a purse of gold to be given to his host. The man, in rapture at sight of so considerable a present, returned a thousand thanks, and said to the caliph, in a joeose strain, "I shall always take you to be a true man, though you should raise your title a fourth or fifth degree higher."*

The same writer relates some interesting circumstances connected with the prohibition of wine, in particular during the reign of the Caliph Omar.†

In the 17th century it would appear that the Turks had acquired a love for wine; for, according to Sir Paul Ricaut, the Sultan Amurath, A.D. 1634, forbade entirely the use of wine, and punished several with death for disobeying his order. A similar edict was issued by Mahomet the Fourth, A.D. 1670, who commanded all those who had any wine to send it out of the town, and the punishment of death was announced as the penalty of disobedience. The edict of this emperor was generally carried into execution. In the decree in question, Mahomet spoke of wine as a most noxious

* Marigny's History of the Saracens, vol. iii., pp. 46-7, edit. 1758.

† History of the Saracens.

* Anatomy of Melancholy, p. 694.

liquor, invented by the devil to destroy the souls of men, to disturb their reason, and to inflame their passions. This monarch was, no doubt, influenced in his conduct by the terrible seditions occasioned by wine in the reign of Mahomet the Third. The latter had his seraglio forced by his soldiers, who were under the influence of wine, and escaped with his own life only by the sacrifice of his principal favourite.

Similar prohibitions have frequently been enforced, in more modern times, in Mahometan countries. In Sudan, for instance, the Sultan Abdelrahman, in 1795, prohibited the use of intoxicating liquor, under penalty of death, and those who made it had their heads shaved, and were publicly exposed to every possible degradation. In Persia, also, during Sir Robert Ker Porter's visit to that country, in 1819 and 1820, a severe prohibition was made against wine by the reigning monarch, who not only abstained himself from its use, but ordered his officers to destroy all the wine they could discover in any part of the kingdom.

The late sultan died of *delirium tremens*, the result of vinous indulgence. The present sultan, his son, on his accession to the throne, issued a proclamation against the use of wine, and caused one million piastres' worth of wine to be thrown into the Bosphorus.

The subjects of the late Tippoo Sultan, in India, debased themselves by excessive indulgence in the use of an intoxicating liquor made from the wild date-tree. The sultan, however, commanded them to be cut down. In places near to the capital this order was faithfully executed. The Chinese (according to their own historians, before Christ 2207), prepared an intoxicating beverage from rice. The most disastrous consequences attended its general use. The Emperor Yu, or Ta Yu, subsequently forbade the manufacture or drinking of it under the most severe penalties. He renounced the use of it himself, and dismissed his cup-bearer, lest, as he stated, the princes, his successors, should suffer their hearts to be effeminated with so delicious a beverage.* This seducing liquor, however, at a subsequent period, was drunk to great excess. The Emperor Kya, the Nero of China, 1836 years before Christ, ordered 3000 of his subjects to precipitate themselves into a lake which he had prepared and filled with this liquor. Ching Vang, also, 1120 years before Christ, found it prudent and necessary to assemble the princes of his empire to suppress its manufacture. It was a source of infinite calamities.†

Wine, at one period, was extensively cultivated in China. Enlightened emperors, however, directed that the vine and other trees, from which intoxicating liquors were

prepared, and which encumbered the ground destined for agricultural purposes, should be rooted up and totally exterminated. These commands were effectually put into execution. In some of the provinces all recollection of the vine had been forgotten, and, in succeeding reigns, when permission was given to plant it, the manner in which Chinese historians allude to it evidently shows that the vine had previously been unknown to them.

The religion of the Chinese, and of most neighbouring nations, enjoins upon its devoted followers entire abstinence from all intoxicating liquors. The inhabitants of China, generally, as well as the natives of Japan, adopt the religious creed of the divinity Fo, whose precepts, by a strict conformity to which alone they conceive they can lead a virtuous life, and obtain his approbation, are as follows: 1st. Not to kill anything that has life; 2dly, Not to steal; 3dly, Not to commit fornication; 4thly, Not to lie; and, 5thly, *Not to drink strong liquors.*

The doctrines of Boodh, or Boodhu, are adopted by nearly one-half of the human race. In Ceylon, the Burman Empire, Siam, and Laos, this imaginary deity is worshipped under the name of *Godama* or *Gautama*; throughout China, under the name of *Fo*, and in Japan by the name of *Siaka*.

The following quotation illustrates the command of this Chinese divinity: "This law commands us not to drink any intoxicating liquor. There are many sorts in the western frontier countries, as liquors made of sugar-cane, of grapes, and of many other plants; in this country (China) it is the general custom to make a strong liquor from rice; of all these thou shalt not drink, with this exception, when thou art sick, and nothing else can restore thy health, and then it must be known by all that thou drink strong liquors. If there be reason for it, thou shalt not touch any liquor with thy lips, thou shalt not bring it to thy nose to smell at, nor shalt thou sit in a tavern, or together with people who drink spirits. There was once a certain Yew-pohan who, by breaking this law, violated also all others, and committed the thirty-six sins; you can see by this that it is no small sin to drink wine (strong drink). There is a particular department in hell filled with mire and dirt for the transgressors of this law, and they will be born again as stupid and mad people, wanting wisdom and intelligence. There are bewildering demons and maddening herbs, but spirits disorder the mind more than any poison. The Scripture moveth us, therefore, to drink melted copper sooner than violate this law and drink spirits. Ah, how watchful should we be over ourselves!"*

The religion of the *Saads*, a term ex-

* Du Halde, vol. i., p. 433.

† Ibid., p. 159.

* Catechism of the Shamans, or the Laws and Regulations of the Priesthood of Buddha.

pressive of a religious or holy character, inculcates similar self-denial and sobriety. This religious community appears to bear considerable similarity to the Society of Friends in our own country, both as regards their address, their principles of peace, and other conscientious scruples. "The Saadhs," remarks a writer, who has published some interesting relations concerning this remarkable sect, "profess to abstain from all luxuries; such as tobacco, paun, opium, and wine." These people, who reside near Delhi, India, are described as peculiarly industrious, charitable, orderly, and well-conducted people, and are chiefly engaged in trade.

Schubert informs us that the laws against intoxication in Sweden are enforced with great rigour. A person who is seen drunk is, for the first offence, fined three dollars; for the second, six; for the third and fourth, a still larger sum, in addition to being deprived of the right of voting at elections, and of being appointed a representative: the offender, in addition, is exposed in the church on the following Sunday. If the same individual is found committing the same offence a fifth time, he is shut up in a house of correction, and condemned to six months' hard labour; and, if he is again guilty, to a twelvemonth's punishment of a similar description. If the offence has been committed in public, such as at a fair, an auction, &c., the fine is doubled; and if the offender has made his appearance in a church, the punishment is yet more severe. Whoever is convicted of having induced another to intoxicate himself is fined three dollars, which sum is doubled if the person is a minor. An ecclesiastic who commits this offence loses his benefice; if it is a layman who occupies any considerable post, his functions are suspended, and perhaps he is dismissed. Drunkenness is never admitted as an excuse for any crime; and whoever dies when drunk is buried ignominiously, and deprived of the prayers of the church. It is forbidden to give, and more explicitly to sell, any spirituous liquors to students, workmen, servants, apprentices, and private soldiers. Whoever is observed drunk in the streets, or making a noise in a tavern, is sure to be taken to prison and detained till sober, without, however, being on that account exempted from the fines. Half of these fines goes to the informers (who are generally police-officers), the other half to the poor. If the delinquent has no money, he is kept in prison until some one pays for him, or until he has worked out his enlargement. These ordinances are read aloud from the pulpit by the clergy twice a year. Every tavern-keeper is bound, under the penalty of a heavy fine, to have a copy of them hung up in the principal rooms of his house.*

Among the laws recently promulgated by

George King of Vavon, one of the Polynesian Islands, is one which renders "murder, theft, adultery, fornication, and the retailing of ardent spirits," punishable by law.*

Moroka, chief the Borolongs, in Africa, not long ago issued a proclamation prohibiting the traffic in ardent spirits. The preamble states that "the introduction of ardent spirits has, in a great measure, been subversive of the good effects both of religious and civil government in every part where it has been allowed, and immediately caused disorder, immorality and vice, and, more remarkably, poverty and distress, demoralization and destruction of life, by incessant depredations upon the property and rights of the weaker tribes." Any person found transgressing this law is subject to the confiscation of all the spirits thus illegally offered for sale, with all other property of every kind belonging to the person or persons thus found transgressing, that may be on the spot at the time of seizure, and in any way connected with the same.†

Some recent enactments in one or two States in America have for their object the total prohibition of the manufacture of ardent spirits.

Howell informs us that, in his time, Spain and Italy were, of all other nations, least addicted to the vice of drinking. If a woman could prove her husband thrice drunk, by the ancient laws of Spain she was entitled to plead a divorce from him.‡

Drunkenness in England is punished by the statute of James with the forfeiture of five shillings for each offence. If the offender is unable to pay the fine, he is subject to six hours' confinement in the stocks. Blackstone observes that the statute presumes that the offender will, at the termination of this period, have regained his senses, and not be liable to do mischief to his neighbours.

Gardiner, in his "England's Grievances," informs us, that, in the time of the commonwealth, the magistrates of Newcastle-upon-Tyne punished drunkards by making them put a tub over their heads, with holes in the sides for the arms to pass through, called the "drunkard's cloak;" in this condition they were obliged to walk through the streets of the town.

A statute law of the Isle of Man, passed 1610, and as yet unrepealed, enacts "that as oft as any man or woman shall be found drunk hereafter, the party soe offending, if not of ability to pay a fine, shall, for the first time, be punished in the stockes, the second time to be tyed to the whipping stockes, and the third time to be whiped therein."

It would be an easy task to adduce numerous local laws of a similar nature, in various parts of the United Kingdom. It is probable,

* Morning Herald, Sept. 3, 1840.

† Graham's-town Journal, March 22, 1838.

‡ Familiar Letters, letter 1655.

* Schubert's Travels in Sweden.

however, that they were seldom carried into effect.

In professedly Christian countries, the measures to remove intemperance, *as a vice*, have been less vigorous and less general than in those countries whose inhabitants profess a widely different and immeasurably less exalted and pure system of religious belief. This unfortunate dereliction of duty forms a subject highly deserving of Christian investigation.

Scheuchzer remarks, that no Christian state has enacted any civil law against drunkenness, and that it is only punished by contempt. This assertion, however, is not strictly correct, as our English and other European laws testify.

A review of the laws, ancient and modern, in relation to intemperance, distinctly shows the inefficiency of legal enactments alone to remove a vice which principally, if not altogether, is the result of improper moral training, imperfect education, and depraved appetite. All curative efforts, therefore, must in a great degree depend on the diffusion of sound religious and moral principles. Education elevates the mind from the debasing and demoralizing objects of sense, and directs its powerful energies to the pursuit of pure and more dignified sources of enjoyment, more worthy of the human character, and calculated at once to exalt, enlighten, and edify, the intellectual powers.

The institutions for the diffusion of education, at present in operation, are undoubtedly productive of immense benefit to the mass of society. In the writer's opinion, however, they are limited too generally to mere intellectual instruction, while the moral improvement of the people, which may be considered as the most essential part of their contemplated utility, is, in a great measure, if not altogether, neglected and overlooked. Knowledge is diffused on the various branches of intellectual and mechanical philosophy; but the relative duties of life, the improvement of the moral and social condition of man, seldom form the subjects of popular instruction. This may be considered as a radical deficiency in the public educational institutions of the present day.

The immense number of Sunday-schools, in conjunction with the various other seminaries for the instruction of youth, might be made greatly instrumental in the diffusion of principles of temperance. The importance of early instruction in sound morality is acknowledged by all. How essential, then, that the youthful mind should be duly impressed with the necessity of guarding against those sensual temptations which, more than any other, militate against the diffusion of Christian principles!

The manner in which our public assemblies of various descriptions in the present day meet together, and hold their annual

and other periodical festivals, has been shown to be a most fruitful source of intemperance. Most of these assemblies are rather seminaries of drunkenness than schools of temperance and sobriety. The elders and conductors of such meetings in general, unfortunately for the morality of our youth, place before them deplorable examples of vice and degradation. The heathens, in their "schools of sobriety," set us an example worthy of imitation. Delightful, indeed, would it be to witness all our public assemblies conducted in such a manner, that young persons might, without fear of evil consequences, intermix with their seniors, and by example and precept acquire permanent habits of virtue and self-denial.

Whatever subordinate means may be adopted for the spread of temperance, it appears sufficiently evident that no measures which fall short of universal abstinence from intoxicating liquors can prove effectual in the attainment of their object. The use of intoxicating compounds is found invariably to degenerate into the abuse. All attempts, therefore, to reform the morals of the people, on any other principle, have signally failed in their object. The example of the Romans and Greeks, and other nations, who rapidly sunk under the enervating influence of strong drink, form instructive illustrations.

It is evident, also, that any effectual remedy for the evil in question must be enforced by personal influence and example, and not simply by legislative enactments.—Legislation may in some degree restrain the public and more disgusting exhibitions of vice. It cannot, however, remove the depraved appetites and vicious inclinations of a people, when they have once become deeply rooted, except, indeed, by facilitating those measures which have for their object the diffusion of sound morality through the medium of education.

SECTION II.

TOTAL ABSTINENCE THE ONLY SAFE AND EFFECTUAL CURE FOR INTEMPERANCE IN INDIVIDUALS.

"With caution taste the Circean cup,
He that sips often, at least drinks it up.
Habits are soon assumed, but when we strive
To strip them off, 't is being flayed alive.
Called to the temple of impure delight,
He that abstains, and he alone, does right."
COWPER.

"Evil habits are so far from growing weaker by repeated attempts to overcome them, that if they are not totally subdued, every struggle increases their strength; and a habit opposed and victorious is more than twice as strong as before the contest. The manner in which those who are weary of their tyrannical endeavour to escape from them appears,

by the event, to be generally wrong; they try to loose their chains one by one, and to retreat by the same degrees as they advanced; but before the deliverance can be completed, habit is sure to throw new chains upon her fugitive. Nor can any hope to escape her but those who, by an effort sudden and violent, burst their shackles at once, and leave her at a distance."

Dr. SAMUEL JOHNSON.

- I. Singular examples of reformation from intemperance. II. Methods employed to remove intemperance in individuals. III. The safety of total and immediate abstinence shown from distinguished medical writers. IV. The same fact demonstrated from experiments on a large scale. V. Curative means, moral and physical, necessary to be employed in the restoration to health of reformed inebriates.

THE habit of intemperance may very properly be considered as a disease affecting both the body and the mind; and for this reason, therefore, any curative efforts, to be permanently successful, must be directed to the restoration of the natural functions of each. Hence arise some interesting reflections of the physical as well as the moral treatment required in the removal of this pernicious and melancholy vice.

Singular examples of reformation from drunkenness.—Singular examples are on record of the habit being removed, from some powerful and unforeseen impression, either of shame, or conviction of guilt, produced on the mind. These instances, however, are of too rare occurrence and too uncertain in their issue to be depended upon or established as precedents of general reformation.

A clergyman in Wales, whose name it is unnecessary to mention, when a young man, was much addicted to drinking. He was cured of this pernicious habit in the following manner. A goat was commonly accustomed to accompany him in his visits to the public-house. On one occasion, he prevailed upon his irrational companion to drink, to inebriation, of ale. The goat could not be prevailed upon to repeat the experiment. From that period the rev. gentleman abandoned his unclerical practice.*

The same result has sometimes been attained by exciting in the mind an adequate counter-passion. The following anecdote is related by Dr. Rush: A citizen of Philadelphia made many unsuccessful attempts to cure his wife of drunkenness. At length, despairing of her reformation, he purchased a hogshead of rum, and, after tapping it, left the key in the door of the room in which it was placed, as if it had been forgotten. His design, in short, was to give his wife an opportunity of drinking herself to death. The woman, who suspected his motive, suddenly left off drink-

ing. "Resentment," observes Dr. Rush, "here became the antidote to intemperance."

Dr. Trotter relates a similar circumstance: A friend of his, an eminent physician in the north, was consulted by a gentleman on the subject of correcting an unfortunate attachment to the bottle, in the wife of his bosom. He formally sat down to deliberate, and the doctor listened with much patience to all the ways and means that had been devised by the distressed and affectionate husband to reclaim his erring wife. So much, however, had been done, and so many fruitless experiments had been tried, that the only means now left was to place a hogshead of brandy before her, and let her drink till *she gave up the ghost!* Considerable emphasis was laid on the last part of the sentence. The lady, suspecting the subject of consultation to be herself, had concealed herself in an adjoining room, and overheard every word. The words of the physician had a strong influence on her mind. Her pride was wounded, and her resentment roused to the highest pitch imaginable. In the whirlwind of passion the chain of habit was broken in an instant, and female delicacy resumed its ascendancy over her actions. From that moment she abjured the intoxicating charm. Dr. Trotter states, that he is sorry to add that his honest friend was never afterwards beheld with complaisance by the fair convert, though he had proved to be her best benefactor.*

A sudden sense of guilt, in moments of soberness, of enormous crimes, contemplated in drunken fits, and prevented by providential interposition, has sometimes occasioned the relinquishment of intemperate habits.—Dr. Rush relates the case of a gentleman in Philadelphia, who, in a fit of drunkenness, attempted to murder his wife for whom he had a strong affection. Upon being made acquainted with this circumstance, he was so struck with the enormity of the crime he had so nearly committed, that he never tasted spirituous liquors afterwards. Shah Suffee, King of Persia, the successor of Shah Abbas the Great, in a state of intoxication stabbed his favourite queen.—Tavernier informs us, that, when he recovered his senses, he was so shocked at the deplorable event, that, in the excess of his grief, orders were issued to destroy every wine-flask in his kingdom.

It was a common practice many years ago in Ireland, for persons, after indulgence in deep excess, to take oaths before magistrates or other officials, for a limited period to abstain altogether from ardent spirits.—Such individuals were called *affidavit men*. Dr. Rush tells us that he has known this practice in America produce a perfect cure of drunkenness.

* Rees's History of South Wales.

* Essay on Drunkenness, p. 214.

An individual in Maryland, America, who was addicted to habits of gross intemperance, on one occasion, having heard considerable uproar and merriment among the domestics in his kitchen, had the curiosity, unseen by the latter, to place himself behind the door, and to ascertain the cause of the excitement that drew his attention. He found that they were indulging in most unbounded laughter, at a couple of his negro boys, who were grotesquely imitating the manner in which their master reeled and staggered, hiccuped and stumbled, when in a state of intoxication. This humiliating exhibition produced so strong an effect on the mind of the individual in question, that from that day, to the joy of his family, he became a perfectly sober man.

The feeling of shame has not unfrequently operated in a similar way. The following curious method was adopted by a naval officer to remove the evil of intemperance from the vessel in which he commanded.—It is found in a small treatise on Naval Discipline, published at no very distant period. “Separate, for one month, every man who is found drunk, from the rest of the crew; mark his clothes, ‘drunkard,’ give him six water grog, or, if beer, mix one-half with water; let him dine when the crew have finished; employ them in every dirty and disgraceful work, &c.” This had such a salutary effect, that in less than six months not a drunkard was to be found in the ship. The same system was introduced by the writer on board a ship, where he subsequently served. When first-lieutenant of the *Victory* and *Diomedé*, the beneficial consequences were acknowledged; the culprits were heard to say that they would rather receive six dozen lashes at the gangway, and be done with it, than be put into the “drunken mess” (for so it was named) for a month.

The fear of death and the dread of eternal punishment, induced by an alarming attack of disease, has sometimes operated in the same way. Dr. Macnish states the case of a gentleman, with whom he was acquainted, who had an attack of apoplexy in consequence of his dissipation. Fortunately, however, the gentleman recovered; and such was the impression made upon his mind from this circumstance, that from that period until his dying day he never tasted anything stronger than simple water.*

Dr. Rush was of opinion that an advantage would probably arise from frequent representations being made to drunkards, not only of the certainty but of the *suddenness* of death from habits of intemperance. “I have heard,” he remarks, “of two persons being cured of the love of ardent spirits by seeing death suddenly induced by fits of intoxication—one case in a stranger, and in the other in an intimate friend.”

II. *Methods employed to remove intemperance in individuals.*—Dr. Rush remarks that the association of the idea of ardent spirits with a painful and disagreeable impression upon some part of the body has sometimes cured the love of strong drink. “I once,” says that distinguished physician, “tempted a negro man, who was habitually fond of ardent spirits, to drink some rum (which I placed in his way), and into which I had put a few grains of tartar emetic; the tartar sickened and vomited him to such a degree that he supposed himself to be poisoned.” Dr. Rush was much gratified by observing that he could not bear the sight or smell of spirits for two years afterwards.

Dr. Kain, of America, recommends in warm terms the use of tartar emetic as a cure for habitual intemperance. He found it of considerable benefit in such cases as came under his own observation. “Possessing,” he remarks, “no positive taste itself, it communicates a disgusting quality to those fluids in which it is dissolved. I have often seen persons who, from taking a medicine in the form of antimonial wine, could never afterwards drink wine; nothing, therefore, seems better calculated to form our indication of breaking up the association in the patient’s feelings between his disease and the relief to be obtained from stimulating liquors. These liquors, with the addition of a very small quantity of emetic tartar, instead of relieving, increase the sensation of loathing of food, and quickly produce in the patient an indomitable repugnance to the vehicle of its administration. My method of prescribing it has varied according to the habit, age, and constitution of the patient. I give it only in alterative and slightly nauseating doses. A convenient preparation of the medicine is eight grains dissolved in four ounces of boiling water—half an ounce of the solution to be put into a half-pint, pint, or quart of the patient’s favourite liquor, and to be taken daily in divided portions. If severe vomiting and purging ensue, I should direct laudanum to allay the irritation, and diminish the dose. In every patient it should be varied according to its effects. In one instance, a patient who lived ten miles from me, severe vomiting was produced, more, I think, from excessive drinking than from the use of the remedy. He recovered from it, however, without any bad effects. In some cases the change suddenly produced in the patient’s habits has brought on considerable lassitude and debility, which were but of short duration. In a majority of cases no other effect has been perceptible than slight nausea, some diarrhœa, and a gradual but very uniform distaste to the menstruum.*

Dr. Macnish states, that he has tried this remedy in several instances, and can bear

* *Anatomy of Drunkenness*, p. 29.

* *American Journal of the Medical Sciences*, No. iv.

testimony to its good effects.* Chambers's celebrated nostrum for the cure of intemperance appears to have owed its virtues to the same powerful medicine. The administration, however, of this drug should be regulated with great caution, otherwise unpleasant consequences may ensue.

Dr. Caldwell, of Lexington, America, has published an article, in which he presumes drunkenness to be altogether a disease of the brain. If his views be correct, the mode of treatment to be employed in such cases will require to be of a suitable character. His essay is certainly deserving of attentive consideration.†

Some absurd methods have been proposed, in order to remove the habit of intemperance. One of these is gradually to reduce the quantity of liquor previously consumed. Dr. Piteairn, for instance, endeavoured to break the habit in a Highland chieftain, who was one of his patients, by persuading him every day to drop as much sealing wax into his glass as would receive the impression of his seal. By this means the capacity of the glass diminished as the wax accumulated, and, strange to relate, this individual was altogether (according to the statement) cured of his bad habit.

A similar anecdote is related by a Scottish literary character, in the instance of a respectable merchant, who became alarmed one day on discovering the uneasy feelings created by having been accidentally deprived of his accustomed potation. After fully determining to abandon the practice, he adopted the following expedient: He filled a bottle with his favourite liquor, and placed it near to his place of transacting business; on taking a dram the first morning, he supplied its place with simple water. The same method was followed the next morning, and so on, until the mixture became so insipid and nauseous, and produced such an effect on his palate, as caused him to abandon the inebriating eup. He continued, adds the same account, to live in exemplary sobriety till his death, which happened in extreme old age.‡

These amusing cases, however interesting in their character, and apparently successful in their object, are deserving of notice only in order to point out the absurd and dangerous examples which they present for the imitation of others. Innumerable instances could be brought forward to show the general tendency and consequences of attempting to remove the habit of intemperance by degrees. The moral and physical changes which that habit produces in the system are too insinuating and too stubborn to induce us, for a moment, to imagine that even the gradually moderated

use of the cause of this disease will uniformly issue in the total extinction of the propensity. The author has had opportunities of witnessing numerous trials of this plan, all of which have terminated in recurrence to previous habits of dissipation. The nature of intoxicating liquors has been shown invariably to lead to excess in their use: numbers, indeed, declare, that if they indulge even in one single instance, in the moderate use of alcoholic stimulus, the mental and physical craving thereby produced is so powerful, and so fascinating in its effects, that they cannot resist the temptation to excess.

A striking example of this kind is found in the dietetic course pursued at the Middlesex County Lunatic Asylum. Dr. Ellis, resident physician at that establishment, in his examination before the Parliamentary Committee, states as follows:—

“When people become insane in consequence of habitual drunkenness, do they retain that disposition to drink?—Yes; that is the first thing they cry out for; in the asylum at Hanwell, half the cry is, they can get no spirits.

Do you ever give them away?—Never, except medicinally.

Do you give beer?—Every day.

How much?—Those who do not go to work have a half-pint of beer at their dinner, and no more; those that go out and work in the fields, in regular labours, have three quarters of a pint of beer at eleven in the morning, and half-a-pint at dinner, and three quarters of a pint of beer in the afternoon.

Do you mean small beer?—Eighteen gallons to a bushel of malt.

Do you make it as a matter of reward with these people to give them more or less beer?—No, they have their regular quantity; we should not do that, because we think that is about as much as they ought to take; we would rather reward them with other things, which they are pleased with, such as tobacco and tea, and allowing them to sit up to supper.

When they recover from insanity, occasioned by drinking, do they relapse?—Yes; sadly so. We had a melancholy case the other day of a man condemned at Newgate for stabbing a policeman. He had been with us, and was cured; he went out and remained for twelve months; he took to drinking spirits again, and stabbed a policeman. He has recovered again, but his character was such that he was lately sent back to Newgate.”*

No wonder that such results follow a mode of treatment so directly calculated to foster the inebriate appetite.

As a general rule, it will be found, that in cases where the result has been of a more fortunate description, the cause may be at-

* Anatomy of Drunkenness, p. 217.

† Transylvania Journal of Medicine and the Associate Sciences, for July, August, and September, 1832.

‡ Anatomy of Drunkenness, p. 215.

* Parl. Evid., pp. 48-9.

tributed to some more than ordinary and lasting impression produced on the mind, or some unusual exercise of moral restraint.

III. *The safety of total and immediate abstinence shown from distinguished medical writers.*—An anecdote related of Webb, the celebrated pedestrian, well illustrates the absurdity of the popular notion that it is dangerous *at once* to abandon the use of inebriating liquors, in particular, when taken habitually to excess. This individual was remarkable for vigour both of body and mind, and lived wholly upon water for his drink. Webb, on one occasion, recommended his favourite regimen to one of his friends, who was fond of wine, and entreated him to abandon a course of luxury, which was equally destructive to his health and intellects. The gentleman appeared convinced with the reasoning of Webb, and told him, that he would conform to his counsel, but thought he could not change his course of life at once, and therefore would leave off strong liquors by degrees." "By degrees!" exclaimed the other with indignation, "if you should unhappily fall into the fire, would you caution your servants to pull you out only by degrees?"

Dr. Trotter judiciously remarks, that in attempting to subtract the vinous potation by little and by little, every one conversant with the subject must have observed that the limited portion of liquor swallowed excites an agreeable glow, and a grateful feeling to the mind, which in an instant connects the chain of habit that it is our duty to break. Hence the insinuating habit re-assumes its ascendancy.

"With regard to drunkards," remarks this physician, "my opinion is, and confirmed by much experience, that wine, malt liquor, and spirits, in every form, ought at once to be taken from them." And again: "As far as my experience of mankind enables me to decide, I must give it as my opinion, that there is no safety in trusting the habitual inebriate with any limited portion of liquor. Wherever I have known the drunkard effectually reformed, he has at once abandoned his potation. That dangerous degree of debility, which has been said to follow the subtraction of vinous stimulus, I have never met with, however universal the cry has been in its favour; it is the war-whoop of alarmists—the idle cant of arch theorists."*

The same opinion had been previously promulgated by Dr. Reid, an eminent physician and able teacher of medicine, in the following decisive and characteristic language: "Wine, and other physical exhilarants," he remarks, "during the treacherous truce to wretchedness which they afford, dilapidate the structure, and undermine the very foundation of happiness. No

man, perhaps, was ever completely miserable, until after he had fled to alcohol for consolation. The habit of vinous indulgence is not more pernicious than it is obstinate and pertinacious in its hold. When it has once fastened itself upon the constitution, it is not to be conquered by half measures—no compromise with it is allowable. The victory over it, in order to be permanent, must be perfect. As long as there lurks a relic of it in the frame, there is imminent danger of a relapse of this moral malady, from which there seldom is, as from physical disorders, a gradual convalescence. The cure, if at all, must be effected at once: cutting and pruning will do no good; nothing will be of any avail short of actual extirpation. The man who has been the slave of Intemperance must renounce her altogether, or she will insensibly resume her despotic power. With such a mistress, if he seriously mean to discard her, he should indulge himself in no dalliance or delay. He must not allow his lips a taste of her former fascination."*

Dr. Rush advocates the same practice, in similar energetic language. In reference to those who have suffered from the use of spirituous liquors, and have made a resolution to abstain from them hereafter, Dr. Rush states that he must beg leave to inform them, they must leave them off suddenly and entirely. No man was ever gradually reformed from drinking spirits. He must not only avoid tasting, but even smelling them, until long habits of abstinence have subdued his affection for them. "But," says Debility, "if we reject spirits from being part of our drinks, what liquor shall we substitute for them? for, custom, the experience of all ages and countries, and even Nature herself (it says again) all seem to demand drinks more grateful and more cordial than simple water."—"Drink water for a few months, and trust to Nature."†

Dr. Scott, at a temperance convention, Buffalo, in the United States, remarks, "It is idle to pretend that a man is going to be killed by leaving off drinking. I should as soon think of killing a horse by leaving off the whip and spur, as to kill a man by leaving off rum. I know more than forty cases in my own practice, where great drinkers have quitted it suddenly, and not one has been injured. And I never knew any other way. When men leave it off, they are, at first, feeble, and their appetite fails, then their appetite becomes ravenous, and then they get well."

Dr. A. Carrick, of Bristol, says, "In the course of forty years' experience, I have never met with an instance (so far as I recollect) of injury arising from having cut at once and entirely with the baneful habit of

* Essay on Drunkenness, pp. 201-4, &c.

* Dr. J. Reid, Monthly Magazine, Feb. 1810.

† Inquiry into the Effects of Ardent Spirits.

drinking spirituous liquors." Dr. Carrick includes in this list not only ardent spirits, but all other strong liquors, such as wine, beer, cider, &c., which, he remarks, "are injurious in proportion to their strength, or the quantity of alcohol they contain."

Sir A. Carlyle recommends the same plan. "I am firmly persuaded," he remarks, "from extensive experience, both in my own person, and on thousands of others, during a professional life of thirty years, that the most abandoned slave to drinking may safely and wholly abstain, and that with certain benefit to his bodily health. The same experienced member of the medical profession, in answer to an inquiry, how a man desirous to refrain from fermented liquors ought to abstain, replies, "In answer to your question, I beg leave to state, that the safest and best way, in every respect, is to do it abruptly and at once.

"Long-continued experience in my profession has convinced me of the safety of a sudden transition from the daily employment of strong drink to a water diet, and that in the most inveterate habits. This method is the most sure, in as far as it removes the hankering after the accustomed beverage, which sipping and tasting, or even seeing it, encourages. It is the best way, because I am assured, from extensive observation, that whenever fermented liquors produce or keep up a disorder, every small quantity of them is poisonous.

"I have known the most emaciated and broken down frames, both in body and mind, to spring up and become renovated after a total abstinence from strong liquors for only a few weeks. I am certain that, in general, the opinions about habitual stimuli and strength-giving liquors are quite erroneous. The stomach is the source of nourishment, and its digesting powers are usually improved directly after the discontinuance of strong liquors. Nor are there any cordials or medicines which, from my experience, I should consider at all useful in the diseases of the stomach and adjacent organs, if strong liquors are employed. In a public hospital, to which I have been one of the surgeons for twenty years, it has been my practice, in all cases of desperate operations and dangerous accidents, to debar the patient *instantly* from all strong liquors, although very often the previous habits of such unhappy persons were most notoriously intemperate; and I am assured of the advantage of such practice, and in general of the consequent great benefit to their constitutions."

The same opinions have been equally strongly urged by other medical men. Objections to this plan have been offered by Dr. Macnish, in a comment which he makes on some observations of Dr. Trotter. They have, however, been ably refuted by Dr. Cheyne, and require no further notice, inasmuch as their fallacy has been unquestionably

demonstrated by numerous experiments of a decisive character.

IV. *The same fact demonstrated from experiments on a large scale.*—Within the last few years experiments on an extensive scale have demonstrated the correctness of the above views.

The following statement is made on good authority: "In the prison of the State of Maine, North America, an important experiment has been made of cutting off habitual drunkards, at once, from the use of ardent spirits, in every form, and confining them to water, and it has been found universally beneficial. Mr. Powers, the intelligent keeper of the prison at Auburn, New York, affirms, that the most besotted drunkards in that prison have never suffered in their health by breaking off at once from the use of ardent spirits, but that, almost as uniformly, their health has been improved. They seem to be very uneasy, and somewhat lost for a few days, and with rather a poor appetite, after which they eat heartily, and improve in health and appearance. It is worthy of remark, that, in all the persons where entire abstinence from ardent spirits is practised, the convicts enjoy a better average of health than is seen in the country at large."

Another statement informs us, that "a more healthy and muscular body of men cannot be found in prison or out of prison than the cold-water drinking convicts who work at the quarry of the Maine prison."—A similar document, in reference to New Hampshire, America, states, "the same valuable experiment has been made here, as in Maine, concerning the effect of cutting off drunkards from the use of ardent spirits, and with the same results. The health of the prisoners exceeds that of the country at large." At Vermont: "The experiment tried in other prisons has been made in ours, and with the same delightful results. The subjects of such treatment renew their youth (as it may be said) directly."

The subjoined statement is extracted from the report of the physician of the Connecticut state prison, dated April 1st, 1829: "In health, no prisoner is allowed any other drink than water. Coffee, tea, milk, and other proper food, and drink, are furnished to the sick and indisposed. The opinion which has so long and so extensively prevailed, that spirituous liquors could not be suddenly abandoned with safety, has, in the experience of this institution, been completely refuted. Of 106 convicts, committed to this prison since its establishment, 90 have acknowledged themselves to have been intemperate, or are known to have been so.—Some of these were veteran drinkers, and one, in addition to spirits, had, for seventeen years, used large quantities of opium. The prisoners were deprived of spirits at once, without a substitute. Those individuals in whom the habit was long confirmed suffered

a temporary loss of appetite, and almost overwhelming anguish for the want of the accustomed stimulus, which seemed for the time to supersede every other evil connected with their confinement. But, by attentive watching, the use of coffee and nutritious and wholesome diet, the appetite was soon improved, and, after a while, greatly increased; the craving for spirits gradually subsided, and, after some time had elapsed, they acknowledged an improvement in their feelings, increase of bodily strength, and vigour of mind. These facts are important, and it is hoped will have an influence in correcting a very general mistake that is prevailing, that the peculiar diseases of drunkards are liable to come on suddenly, if spirits be suddenly abandoned. With this erroneous impression many have resorted to substitutes and preventives, which only changed the stimulus without removing the habit."

A recent annual report of the board of managers of the Prison Discipline Society, at Boston, in Massachusetts, contains the following valuable and interesting statement: "There is another particular in which this establishment is worthy of notice. Like other and similar institutions, it is a place to which intemperance consigns its thousand victims. But, in other institutions, it has been customary, to a great extent, in former years, to break them off from their bad habits by degrees, and not suddenly, lest it should produce *delirium tremens* and death. Not so in the House of Correction at Boston: they are broken off at once in all cases, and the danger which has been apprehended is guarded against with a strong decoction of wormwood. This is prepared in the form of tea, and given freely. With perhaps one exception, there have been no fatal consequences from *delirium tremens* since this practice was introduced in the House of Correction at Boston. This is true, notwithstanding the fact that many of the worst cases of drunkenness in the city are subject to this treatment, and the disease often assumes a very threatening aspect. But the strong, warm wormwood tea, with scarcely an exception, affords relief."

A communication to the same effect, from M. C. Aubanel, director of the penitentiary of Geneva, dated 25th of November, 1837, to Dr. Fauconnet, of London, has been recently published. The writer states as follows: "During twelve complete years that I have been at the head of an establishment, in which all the prisoners only receive wine in the very rare exceptions which I have just mentioned, I have constantly remarked, without any exception, that the privation of wine has occasioned no inconvenience to those who drank it with more or less moderation; and, that, in all cases where this privation had been preceded by an improper consumption of wine or liquors, (without speaking of confirmed drunkards,) the

change of diet has presented remarkable advantages to the health of individuals. I have heard a great number of them express their astonishment at being accustomed so easily to such an abstinence, and being able to persevere in hard daily works without experiencing the want or feeling the privation of that pretended vehicle of strength." "I believe I can safely affirm, that the opinion that a man cannot do without wine or spirits is a great error, and that more particularly the changes from the abuse to a sudden and complete abstinence are followed by injury to health or to life, is an opinion without any foundation, except in some very rare occurrences."

That persons who have been accustomed to excessive and continued habits of inebriety may venture, without fear of dangerous consequences, to abandon at once the use of intoxicating liquors, is demonstrated not only from the experiments made on so large a scale in America, and on the continent, but from equally numerous experiments made in our own country. A few cases only will be related among hundreds which are continually taking place in similar public establishments. A greater part of the inmates of the gaol at Wilton, previous to their committal, are in the practice of using intoxicating drinks, and many of them to excess. On entering the prison, however, they are reduced to water diet; and, with scarcely a single exception, their health improves from this change of beverage. In most cases, this improvement is of a very decided character.* A similar practice is almost uniformly observed in the various prisons throughout the United Kingdom.

The following important and conclusive testimony is yet more demonstrative of these views. Mr. Thomas Purdon, in a document dated Nov. 19, 1840, says,—

"After an experience of twenty years, as governor of Richmond Penitentiary, during which period at least twenty thousand persons were committed to the prison, a great proportion of whom were for drunkenness, I never knew of one solitary instance of an individual suffering from being at once cut off from any thing stronger than milk. The contrary is the fact, that they invariably improve in health from being debarred the use of any intoxicating liquor."

The same statements, also, may be made in regard to the lunatic asylums of this country. The following brief quotation is made from the report of the Lincoln Lunatic Asylum, for 1837, an institution which has been pronounced by an eminent writer to be "one of the best conducted establishments in Europe." "A decidedly improved state of health," says the report, "has been found to follow the total disuse of fermented liquor, and the more generous

* Bristol Temperance Herald, 1839.

diet which has been substituted." The patients, at this period, amounted to one hundred and fifteen.

V. *Curative means, moral and physical, necessary to be employed in the restoration to health of reformed inebriates.*—In the treatment of persons who abandon altogether the use of inebriating liquors, several important considerations must be kept in view. Those subsidiary remedial measures, which tend to restore the natural state of the functions of exhausted nature, may be considered as they relate either to the mind or body.

With regard to the mental state of the sufferer, such attentions are requisite as will tend most effectually to elevate the patient's mind from that temporary anxiety and depression which usually follows the abandonment of old and deep-rooted habits. Cheerful society, rational conversation, scenes of an attractive character, and, in particular, pure fresh air, which has been correctly termed "the best cordial," tend in a considerable degree to promote this object. It is of the utmost importance that these, and all similar legitimate measures, should be adopted, safely to carry the inebriate through this critical stage of reformation. Many unfortunate individuals, for lack of necessary attention, irrecoverably fall again into their former melancholy condition.

It must not, then, be forgotten that *the habit of drunkenness is a disease of the mind*. The most vigorous efforts must be directed to destroy, in particular, all associations calculated to revive the recollections of former habits. "Some men," as Dr. Rush remarks, "drink only in the morning, others at noon, and some at night. Others drink only on special occasions, such as on market-day, at clubs, and certain convivial circles."—These associations or impressions, which by habit become incorporated with our nature, must be counteracted as far as possible by some new and attractive engagements.—Few persons, unaccustomed to the snares of drink and its thousand usages, can realize the tenacity with which old habits cling to the reformed drunkard, and the strong physical cravings which often impel him to seek relief in the cup of intoxication. The man who was unable to pass an inn on the roadside without entering its portals, and indulging in a glass, but who, on one occasion, by an unusual exertion of mind, succeeded in passing the spot, and straightway returned to reward himself with a bumper, presents an amusing but instructive illustration.

Encouragements to perseverance should be held out in every possible way. Above all, nothing should be said or done, in the sense of reproach, which can in any way tend to induce the candidate for reform to plunge himself in despair into the deep from which he has but recently been extricated. Dr. Trotter remarks: "I firmly believe that the injudicious and ill-timed chastisement of officious friends has driven many an un-

fortunate inebriate to ruin, who might have been reclaimed by a different treatment.—Nay, if such corrections are applied when the mind is ruffled with nervous and hypochondriacal feelings, and depressed with low spirits, which so frequently follows a last night's debauch, the consequences may be fatal; and it is well known that suicide has sometimes been first resolved upon, after these ghostly admonitions.*

Drunkenness is also a disease of the body. Judicious means, must, therefore, be adopted to restore the functions of the system to their usual natural and healthy tone. A brief consideration of the main points requisite for this purpose is absolutely necessary in treatises of a practical description.

The medicinal treatment of reformed inebriates ought to be as simple as consistent with the health of the patient. Derangements of the stomach and bowels, and their consequent train of unpleasant and often harassing symptoms, are those which most commonly demand attention. Small proportions of prepared chalk, (*creta preparata*,) or magnesia, mixed with a still smaller quantity of rhubarb and powdered ginger, usually relieve those acid eructations and painful distensions of which frequent complaint is made. In cases where the stomach exhibits unequivocal signs of weakness, the following simple tonics, as directed by the London Pharmacopœia, or similar innocent preparations, may be administered:—

Compound infusion of gentian: Take of gentian root, sliced, orange-peel, dried, of each a drachm; fresh lemon-peel two drachms; boiling water, twelve fluid ounces. Macerate, or, in other words, let it stand for an hour in a lightly-covered vessel, and strain.

Infusion of chamomile: Take of chamomile flowers two drachms; boiling water half a pint. Macerate for ten minutes in a lightly-covered vessel, and strain. Three table spoonfuls of either of these infusions may be taken twice or thrice every day. It will not be necessary to continue the use of these medicines longer than a week; or, at the utmost, fourteen days. Tonics, as shown in previous sections of this work, after a time not only lose their good effects, but become injurious.

It is an oft-quoted, but correct adage, "He that physic to a custom brings, brings his disease too to accustoming."

Dr. Trotter recommends the waters of Bath as in considerable repute for their efficacy in recruiting the worn-down constitutions of inebriates. The tonic effects of the iron contained in these waters seem to exercise a beneficial influence. Dr. Macnish recommends the use of chalybeates where there is much debility. These re-

* Essay on Drunkenness, p. 196.

medies, however, are only accessible to the rich. It is probable, moreover, that the change of scene, and cheerful and diversified society, which are the agreeable concomitants of a visit to some watering place, produce a more beneficial influence, both on the mind and body, than the mineral waters.

Appropriate diet is of vital importance in the restoration of inebriates. It is a foolish but too prevalent notion among reformed drunkards that abstinence from strong drink requires a free supply of animal and other solid food. If it were correct that the greater the amount of food taken into the system, the more nutriment would be afforded, some plea might be advanced in behalf of the practice under consideration. Such, however, is not the case. A moderate proportion of food, well digested, will afford more nutriment and more invigorate the system than double the quantity less completely concocted, and consequently less in accordance with the wants of the system. The latter practice, indeed, disorders the functions, and occasions symptoms which too frequently induce the inexperienced and injudicious to recur to alcoholic potations for immediate relief. The food, therefore, of reformed inebriates must be simple and plain in quality, and taken in moderate quantities, and at proper periods. The labour, in short, of the stomach must not exceed its capabilities of action. "I conceive," remarks Dr. Trotter, "the frame of an habitual drunkard to have been so much exhausted by inordinate and unnatural stimuli, that it has long been my practice to commit him to the regimen of children, such as a diet of milk, and other kinds of nourishment of the mildest quality. In short, instead of withdrawing the bottle by those slow degrees, which have been long recommended by physicians, my plan of cure is at once to take from him every thing that is highly stimulating, to put him on food in direct opposition to his former mode of living, and consign him to the lap of nature, as if his existence were to pass through a second infancy. Indeed, the reformed drunkard must be considered as a regenerated being."* Dr. Rush informs us that a diet consisting wholly of vegetables cured a physician in Maryland of drunkenness, probably, remarks the same physician, by lessening that thirst which is always more or less excited by animal food.

The use of condiments and tinctures of every description, is, on all occasions, to be deprecated.

The same observations apply to the use of tobacco, opium, and other similar pernicious drugs. It is a practice fraught with danger, and too often induces the reformed inebriate to return to his vicious indulgence. "If teetotalers," remarks Mr. Higginbotham,

surgeon, of Nottingham, "continue the use of tobacco in any form, they must not expect the full share of health they otherwise would have by abstaining from intoxicating drinks, as affections of the head, chest, and stomach, with low spirits, in their train, are continued and aggravated by the use of that narcotic weed. Medical experience has fully proved this fact."

A practice prevalent among the members of the temperance societies consists in almost deluging the body with hot diluents, such as tea, coffee, and other like beverages. Large quantities of these liquors debilitate the stomach, and generally injure the system. These liquors, indeed, ought to be largely diluted with milk or cream. Strong decoctions of hot tea or coffee, not only weaken the digestive functions, but act injuriously on the nerves.

This subject, indeed, involves almost every consideration, physiological or mental, that enters into the requirements of health. It is erroneous to suppose that abstinence from inebriating liquors alone will, in every instance, restore the system to health, or prevent those numerous derangements which inevitably follow the infringement of nature's laws. A diet proportioned to the wants of the system and capabilities of the stomach, exercise exactly suited to the then strength, pure air, cheerful society and its associations, and abstinence from all the usual prolific sources of ill health; these requirements must be strictly enforced, or it is in vain to look for a permanent reformation of the inebriate. A few days', weeks', or month's perseverance, however, in this mode of treatment, with the occasional assistance of the most simple medicines, always of course attended with entire abstinence from alcoholic stimulants, will, in by far the greater number of cases, completely restore the disordered functions of nature, and bring with it the delightful and animated sensation of renewed health and strength.

SECTION III.

INDIVIDUAL TESTIMONIES IN FAVOUR OF TOTAL ABSTINENCE.

Heretofore, in our country of England, all foreign wines were sold in apothecaries' shops, for the relief of the sick, weak, and aged; then physicians walked on foot, for the service of God's people: but when it once came to be sold publicly in taverns, then they rode on horseback, like princes. —HARLEIAN MISCELLANY.

In the course of forty years' experience, I have never met with an instance of injury arising from having cut at once and entirely with the baneful habit of drinking spirituous liquors. —DR. CARRICK.

* Essay on Drunkenness, p. 211.

I have repeatedly seen men, who never tasted drink, perform the greatest exploits in work, both as to degree and duration.—*DR. RUSH.*

- I. Testimonies of literary and medical men, clergymen, senators, and other eminent individuals.—II. Testimonies of agriculturists, mechanics, and other artisans engaged in arduous labour.

THE testimonies adduced in this section are selected from an immense mass of similar evidence. The personal experience of individuals in every rank and condition in life, now on record, exhibit, in the strongest possible light, the safety and efficacy of total abstinence. The principle is now no longer one of doubtful character. It has been submitted to the test of severe experiment. The following individual evidence is submitted to the calm and unbiassed consideration of the candid reader, as still further illustrative of the views advocated in this work.

I. *Testimonies of literary and medical men, clergymen, senators, and other eminent individuals.—The Honourable Judge Hall, of America:* “I am now in the ninth year, (and within about four months of its completion,) of strict total abstinence from the use, either for beverage or medicine, of all intoxicating liquor. I have noticed my experience, and contrasted it with that of the twenty-four preceding years, while I temperately used these liquors. The result of my observations is—

“1. My health is much improved. I never suffered much from sickness; I was never dangerously ill; but I can clearly perceive, that the use of intoxicating liquor, although temperate, did impart a feverish tendency to my constitution, so that what used to end in fever of three or four days’ sickness, requiring active medicine, now passes off as a slight indisposition, like a common cold, scarcely requiring medicine, rarely confining me to the house, and then not entirely disqualifying me from my usual employment. There is an elasticity in my constitution, and I have a command over it different from what was the case in the former period; so that I easily throw off symptoms of approaching disease that used to terminate in fever; and I am convinced, that if, in 1803, I had adopted the course of entire abstinence from intoxicating liquors, with the same care I otherwise used in respect to my health, I should have escaped nearly all the sickness with which I have been afflicted.

“2. I can endure without inconvenience, cold, heat, and fatigue. My power for continued bodily labour, and mental exercise, is increased. I feel in a constant state of fitness for mental exertion. In this respect, comparing my present and former experience, I believe, that through the use of intoxicating liquors, though temperate, I sustained a loss of at least

the twelfth part of the working hours of every day; a rate, according to which I lost, in the twenty-four years of temperate use of intoxicating liquors, two years. Yet mine was, in general estimation, a life of unusual application and industry; and my loss was not one-third that which commonly happens from the like causes. I have never seen a person, or heard of one, who has made a reasonable trial of a course of entire abstinence from intoxicating liquor, who denies that it is attended with great advantages, or suggests any evil incident to it.”

The Hon. Judge Brewster, of Riga, Monroe county, New York: “I have lived for nearly thirty years in this place—have converted a large quantity of wilderness into a fruitful field—have employed a large number of men, and have, according to the custom of the country, consumed a large amount of ardent spirits—and observed much of the deleterious effects resulting from it to my men. About twelve years ago, I banished the article from my business and premises, and totally refrained from it myself, and although I used it (what was then thought) temperately, I learnt by experience, (after I had left off its use,) that it had a most deleterious effect on me, as well as on my men. I found my men could sustain cold and heat, storm and fatigue, much better without this stimulus than with it. About two years ago, I commenced total abstinence from all intoxicating drinks, and I am constrained to believe that I have experienced a much more sensible improvement in my bodily and mental powers than *when the reform was but half accomplished*. I am now sixty-two years old, and find, so far as I am capable of forming a judgment, that my bodily and mental powers are better than they were twelve years ago, and that far the greater share of improvement has been experienced since I left off the moderate use of fermented drinks. My health is next to perfect, which used to experience frequent interruptions; my mind is clear and perceptive, without much fluctuation; my temperament, which is naturally ardent, has become calm and serene; and I hope eternally to bless God that he gave me wisdom and grace to adopt total abstinence from all fermented liquors.”

The Hon. Judge Loomis, of Montpelier, Vermont: “From my youth, until over forty-five years of age, I was in the habit of drinking intoxicating liquor. Through the mercy of God, I was preserved in the class called ‘moderate drinkers,’ and supposed at times, at least, that it was beneficial to me.

“Whilst in the use of it, I was frequently troubled with headache, especially in the morning.

“For eight or ten years past, I have wholly abstained from the use of intoxicating liquors; I find dispensing with the use of

them has been decidedly beneficial, and that I was entirely wrong in supposing they did me any good.

"The benefits most perceptible to myself are, almost entire relief from headache, better rest, more refreshing sleep, greater peace and tranquillity of mind, more distinctness and satisfaction in reflection and meditation.

"In addition, I have a consciousness of having seen and abandoned a very dangerous and sinful practice."

Rev. Samuel Miller, D.D., professor of Ecclesiastical History in the Theological Seminary at Princeton, New Jersey: "More than six years ago, (1836,) when I was approaching my sixtieth year, hearing so much said about the mischiefs of stimulating drinks, and entering, as I did, with cordial zeal, into the temperance reformation, I determined to go beyond those around me, and to abstain not merely from ardent spirits, but make the experiment, for at least three months, what would be the effect of an immediate and entire abstinence from wine and all intoxicating beverages. Accordingly, I broke off at once, and, from that day to this, have not tasted wine, excepting at the sacramental table. I have also abstained, during the same time, from cider, beer, and every species of drink stronger than water, and never set any of them on my table, unless they are called for by peculiar circumstances. The experiment had not proceeded more than a single month, before I became satisfied that my abstinence was not only distinctly but very strikingly beneficial. I was so far from suffering any injury from the abstraction of my accustomed stimulus, that the effect was all the other way. My appetite was more uniform and healthful, my digestion decidedly improved, my strength increased, my sleep more comfortable, and all my mental exercises more clear, pleasant, and successful. Instead of awakening in the morning with parched lips, and with a sense of feverish heat, such feelings were almost entirely banished; and instead of that nervous irritability, which, during my indulgence in wine, was seldom wholly absent, I am now favoured with a state of feeling, in this respect, very greatly improved. In short, my experience precluded all doubt, that the entire disuse of all intoxicating drinks has been connected, in my case, with benefits of the most signal kind; with much firmer health than I enjoyed twenty years ago, with more cheerful feelings, with greater alacrity of mind, and with a very sensible increase of my capacity for labour of every kind. I can never cease to be grateful that I was led to make this experiment; and think it is highly probable that, if I had not adopted this course, I should not have been in the land of the living. I have had occasion frequently to observe, that some who, like myself, drink

nothing but water, are very liberal in the use of that element. They drink it often and largely, and especially make a very free use of it at dinner. This was once my own habit; but I became fully convinced that it was not salutary, at least to me. The truth is, since I have left off the use of all intoxicating drinks, I seldom experience the sensation of thirst. Often I do not touch a particle of any kind of drink at dinner, and even when I am overtaken with thirst, I find that, in my case, it is better slaked with a few tea-spoonfulls of water, taken slowly, and at several swallows, than by a whole tumbler full or double that quantity, as many are accustomed to take. I am very confident that we may take too much, even of water; and that deluging the stomach even with the most innocent fluid tends to interfere with perfect digestion."

The Rev. John Pierce, D.D., of Brookline, America: "For more than a quarter of a century I have conscientiously abstained from distilled liquor. In the meantime I have occasionally taken a little wine, when in company, and a tumbler of cider at dinner. At length, thinking this unnecessary, and having before me the example of a beloved father, who abjured the use of intoxicating beverage after he was eighty years old, and lived with both bodily and mental faculties almost wholly unimpaired till past the age of ninety-one; and continually hearing that the habitual drinkers of ardent spirits exclaim, 'Give us your wine, and we will drink no more rum,' I resolved to abstain from the use of every thing which can intoxicate. This practice I have continued for more than two years, and the experiment has more than answered my most sanguine expectations. My health has been fine and uninterrupted. I have not had even a common cold. As to corporeal exertions, though in my sixty-third year, I walk ten miles in an afternoon, at the rate of four miles an hour, without fatigue; and, what is better, without thirst. As to the mental efforts, I never feel so well prepared for close application as immediately after I have walked ten miles without drink. Uniform health of body is almost necessarily attended with cheerfulness of mind. The saddest interruption that I find to the latter is, that, in the use of drinks, I cannot induce more to be as I am."

The Rev. Alonzo Potter, D.D., professor of Intellectual and Moral Philosophy, in Union College, Schenectady, New York: "You inquire whether I have received any special benefit from discontinuing the use of intoxicating liquor as a beverage. I answer by stating a fact. During two years which have elapsed since I discontinued the use of wine and porter (the only intoxicating substances which I have been accustomed to take), I have improved materially in health, and have been able to take more

prolonged efforts both of body and mind.—We are not authorized, from any such fact, to infer that the abstinence and the improved health stand to each other in the relation of cause and effect. But when it is found, as I doubt not it will be in the course of your inquiry, that similar experiments by others have been generally, if not invariably, followed by the same results, the relation will be established, and will merit the deep regard of all young men. It may be proper to add, that this change in my habits was not induced by any hope of promoting my health. I had rather cherished the belief that some local infirmity, as well as an extreme general debility from which I sometimes suffered, might be partially relieved by the use of good wine; and, in this opinion, I found myself confirmed by the advice of judicious friends and physicians. But it was growing more and more evident that I could not succeed in persuading others to renounce one kind of intoxicating liquor, while I continued the habitual and daily use of another; and that in order to impress upon reformed inebriates the necessity of total abstinence from all that could intoxicate, as the only means of persevering in their new course, I must add example to precept. And further, that, related as I was, to a large number of interesting young men, the hope of the country and of the church, it was peculiarly incumbent on me to exhibit a consistent and blameless example. On these accounts I felt obliged to deviate from my former practice; but with the expectation of suffering considerable physical discomfort in my own person, and not a little reproach from others. In both these respects I have been happily disappointed. My friends have appeared perfectly willing to concede me the enjoyment of my liberty in this respect, and I have had, since the expiration of the first few weeks, almost daily consciousness of increased health and enjoyment. While I continued to drink wine, I had repeated attacks of hoarseness and sore throat, which disabled me from the comfortable discharge of my duties as a minister, and induced me, at length, to retire from them. Since Oct. 1833, I have had but one slight attack of this kind; and there has been no Sunday on which I could not have officiated in public with ease. I do not suppose that the disuse of wine has been the only cause of this improvement; but, I am persuaded, that it has been one of the most powerful. It should be understood, that for some years previous I had been accustomed to take wine, at dinner, daily, and with as much freedom as was proper in a clergyman, or in a zealous advocate of the temperance cause.”

The Rev. Henry C. Wright, late agent of the American Sunday-school Union, and Children's Preacher in Boston: “1st. The effects of abstinence on health.—I once kept in my house various kinds of intoxicating drinks, especially wine, cider and brandy,

and used them occasionally; wine and cider often, generally on the Sabbath after preaching. I also freely used tobacco, smoking it. What was the effect on my physical nature?—I had a constant sensation of uneasiness at the stomach,—a constant burning, which used to rise in my throat, what is commonly called the heart-burn, I had continually. I was also visited with a headache that entirely unfitted me for business; I had frequent attacks of diarrhœa: I was afflicted with a perpetual thirst; my sleep generally disturbed and unrefreshing; my food seldom relished, and never without powerful spices, mustard, pepper, &c. At the age of thirty, I used to think that I was getting into a poor way, and should soon be broken down as to health. I used to wonder what could be the cause of my pains and troubles. Such I now know was the effect of stimulating drinks and substances on my bodily system. For seven or eight years I have used for beverage pure cold water, and nothing else; nor have I used any tobacco in any form. I use nothing but water at my meals, morning, noon, or evening; or at any other time. My uneasiness at the stomach, the heart-burning, and the tendency to vomit, are gone. I have had nothing of them for five or six years. My head never aches, except it is produced by studying late at night, and want of sleep. I relish my food, always having a good appetite. As to my physical system, I have not a tenth part so many pains and disorders as I had formerly, and I know it is owing to my having abandoned the use of all heating and exciting drinks, and of tobacco.

“2nd. *As to the effect on my capability of making great and continued efforts of body and mind.*—During the last five years of my life, I have made greater efforts of body and mind than I have ever made before. Two of these five years, I was an agent of the American Sabbath School Union, in which I travelled about five thousand miles, preaching and lecturing, upon an average, about once a day during the whole time; frequently riding in an open gig twenty-five and often thirty miles, after preaching three times in one day. I have frequently travelled all day, in an open gig, in rain and snow-storms, under burning suns, and in freezing cold.—I never made so much mental effort, nor so great. I have written more in the last five years than in any other equal proportion of my life. I can truly say that since I have got my system thoroughly into a *cold water habit*, I know not what fatigue is; whereas, ten years ago, I used to get exhausted easily by mental and bodily efforts. Eight years ago, it would have tired me more to speak in public half an hour, than it would now to speak an hour.

“3. *Effects on the cheerfulness and uniformity of my feelings.*—Here I could write a volume. I solemnly believe that nineteen-twentieths of the fault-findings, the unkind-

nesses, the bickerings, the strifes and contentions of domestic and social life, should be charged directly to narcotic and intoxicating drinks and substances. The use of tobacco, in any form, of cider, beer, wine, or any other intoxicating drink, is enough to destroy the most cheerful and amiable temper God ever made. I do not claim to have received such a temper from my Maker, but such as I did receive has, in days past, been awfully perverted by stimulants of various kinds. I used to be subject to fits of deep depression, and great excitement—as I supposed, owing to a peculiar *natural* temperament. My family used to call me *nervous*, when on the high pressure and low pressure. The world often seemed to be clothed in darkness—no hope, no friends; could do nothing; make no mental or bodily efforts; cared not to see any one, or to speak to any one. Then suddenly an irrepressible feeling of joy, that would burst over all bounds. Thus I had my *ups* and *downs*—no calmness in my joys, no uniformity in my social and domestic feelings and habits. I was often visited with most frightful, horrid, and unimaginable dreams. My whole intellectual and moral nature was utterly disordered. I used to wonder, and so did my family, what could be the matter with me. I now know what was the trouble. It was the occasional use of stimulating drinks, combined with the habitual use of that most filthy and disgusting of all filthy and disgusting things, *tobacco*. I lived in a cloud of nauseating, suffocating tobacco-smoke.—May God forgive me! My wonder is, that my family, or my people over whom I was placed as a minister of Christ, could endure me. My head was deranged, my heart was deranged, and my body was deranged, and I thought my family and all the world around me were deranged likewise. Now, thanks be to God, I am free! Ever since I have got my system into a *cold water habit*, I feel like a new man. I enjoy a uniform calmness and cheerfulness, and contentment in my heart, to which the drinker of stimulating liquors, and those who use tobacco, must ever be strangers. I feel that my mind is now in a state to enjoy intercourse with men and with God. I know that intoxicating and exciting drinks and substances would entirely disarrange that state, and unfit me to enjoy such intercourse.—This world uniformly looks cheerful, and death and eternity look pleasant and desirable. I can but give thanks to God for leading me back to simple cold water as my only beverage. I think I shall never be fooled and mocked again by alcohol in any form, nor by tobacco. I am free, and I think I would rather die than again become the slave of these fell destroyers. I would add, my family having all united with me in the use of cold water, unite with me in attesting the truth of this statement. Our experience enables us to say much more in

praise of cold water. Be assured we have reason to bless God for cold water."

The Rev. Edward Hitchcock, professor of Chemistry and Natural History, in Amherst College, Mass.: "In order that you may rightly understand my case, I ought to state, that in consequence of an ignorant disregard of the laws of hygiene, more than twenty-five years ago, my health began to be seriously affected with dyspeptic complaints, which became more and more aggravated for fifteen years, chiefly in consequence of the absurd prescriptions that I followed. Among others, so far from being directed to abstain from all alcoholic drinks, brandy was recommended with dinner, and wine after preaching on the Sabbath. From the brandy I perceived no good effect, and therefore soon abandoned it; and the wine was so decidedly and immediately injurious, that I used it a still shorter time. One recommendation, however, that was given me fifteen or twenty years ago, was of real service; viz., to give up the use of tea and coffee in the morning. For a few months after doing it, an almost daily headache afflicted me. Soon, however, headache and I parted company, and we have hardly met since, except of late, in consequence of a severe blow on the head. Even now we are on poor terms; and it threatens to leave me, if I will not nourish it with some drink more stimulating than water. I continued in the use of weak tea at night for several years longer; but at length I gave up every alcoholic and narcotic drink, and do not recollect that I have tasted of them for the last five or six years, except at the communion table. In these changes, the nearer I came to the use of water alone for drink, the greater I found to be the advantage, both to health and happiness. The disuse of snuff, also, I found to be decidedly beneficial.—Ten years ago, my system had become so much shattered by long abuse, that I was obliged to leave the ministry. But by simplicity in living, with water only for drink, and faithful attention to exercise, I was ere long enabled to resume intellectual labour, and since that time I have generally been able to accomplish far more, both physically and intellectually, than at any previous period. However small my labours may seem to those who possess more vigorous constitutions, and more industrious habits, I have great reason to be thankful for the power to perform them; for they seem to me to be so much added to my existence, as the rich fruits of an imperfect conformity to the rules of temperance, since my constitution, ten years ago, seemed to be so nearly worn out, that it appeared scarcely possible it should ever recover from the prostration under which it laboured. Precisely how much of these good effects of attention to temperance and exercise I am to impute to disuse of alcoholic and stimulating drinks, I am unable to say. Yet I am quite sure, that had I

continued to use such drinks, all the other means that I have employed would have been wholly ineffectual. The particular benefits that, in my case, I think can, in a greater or less degree, be traced to the use of water only, as a drink, are the following:—

“1. Freedom from headaches.

“2. Relief from nervous irritation.

“3. Freedom from unnatural thirst; so that now I never drink more than nature demands; and when I do drink, it is with great relish.

“4. Greater equanimity and clearness of mind; so that I can pursue study in moderation in much longer time without the necessity of seasons of relaxation: I mean long seasons of relaxation. I should doubt whether, for a single day, I can study more than when under the influence of stimulants, except so far as improved health operates favourably. But I am not apt under the aqueous regimen to overwork the mind one day, so as to unfit it for exertion the next; and, in the long run, I doubt not, but the power of making intellectual efforts is much increased, and the same is true of bodily exertion.

“5. I can judge better when nature demands repose. And I find that, in ordinary cases, the system chooses for this purpose the early part of the night.

“6. More uniformity and buoyancy of the animal spirit. A cheerful state of mind is the consequence, and a capacity to enjoy for much longer time, and with few drawbacks, the pleasures of social intercourse.

“7. The power of determining with greater accuracy the nature of the religious emotions. So long as the brain is under the influence of unnatural stimulus, or inactive from its absence, the mind cannot well determine its real state on this important subject.

“A few years ago I was called to make a geological survey of the state of Massachusetts, which required about five thousand miles of travel, in an open waggon, at a rate not greater than from twenty to thirty miles per day, and very severe bodily exertion, in climbing mountains, and in breaking, trimming, and transporting more than five thousand specimens of rocks and minerals. I was usually employed from sunrise till ten o'clock at night, with little interruption; and I think it was the severest protracted labour that I ever underwent. Yet, during all my wanderings, I drank not one drop of alcohol, nor, indeed, any kind of stimulating drink, except perhaps from twelve to twenty cups of weak tea. And I found myself more capable of exertion and fatigue than in former years, when I was in the occasional use of stimulating drinks.”

The Rev. Orin Fowler, of Fall River, Mass.: “I have abstained for a number of years from all ordinary use of all intoxicating drinks (which I never took largely),

water having been, for a long time, my only drink. My health is perfectly sound, and has been so for twenty years, in which time I have had but few pains and aches, except during a short sickness some ten years since; and I feel as youthful and vigorous (I am forty-four) as when I was twenty-four. I have, for years, and at all seasons, preached uniformly, three, frequently four, sermons on the Sabbath, and several others during the week, besides making more than one thousand pastoral visits, annually, and attending to much other labour, bodily and mental; and believe that upon my water drinking, regular diet, and early rising, with the divine blessing, I may hope to be young, vigorous, and healthy, for many years yet to come.”

The Rev. Leonard Woods, D.D., professor of Christian Theology, in the Theological Seminary, Andover, Massachusetts: “After I was admitted to the sacred office, I proceeded only a few years according to the common usage, before I began to abstain in part from distilled liquor. For, though my health was almost uniformly good, I was sometimes troubled with the headache and other complaints, which I was led more and more distinctly to attribute to the use of such liquor. About thirty years ago, I gave it up wholly, as a common drink, with a very perceptible benefit to my health. The next step, which required no small degree of resolution and firmness, was to exclude it from my family, and no longer to provide it for labourers or visitants. Still I continued the occasional use of wine, especially after the labours of the Sabbath, thinking that I must take something of the kind to prevent exhaustion and secure permanent health. But I soon found myself as much mistaken in this as in the other case; for the effect of wine was in a great measure the same as that of distilled liquor; and being more and more sensible that I was better without it, and having a growing conviction that it was unnecessary and injurious, I gave up the wine also, first in ordinary cases, and then wholly. Both before and after this, I made long trials in various ways, of the effect of other fermented liquors, as cider, ale, and porter; and though they were urged upon me by respectable and pious men, and though I was able to bear up under the moderate use of them occasionally, yet the lesson which my own experience and observation taught me was the same here as in the other cases; that is, that all such drinks are both unnecessary and hurtful. And I have now for a long time, and with a most decided improvement of my health, acted on the principle of total abstinence from all intoxicating drinks.”

Benjamin Silliman, M.D., LL.D., professor of Chemistry, Pharmacy, Mineralogy and Geology, in Yale College, New Haven, Connecticut: “At about forty-three years of age I suffered an almost entire prostration of

health, in consequence of excessive labour, and affliction from the sickness and death of many of my children. During several years in which I was sinking, I tried in vain, under medical direction, the most approved forms of stimulus, joined with the most nutritious and varied diet. When at length my powers were almost broken down, I was persuaded by a friend to abandon the use of wine and every other alcoholic stimulus, and to depend upon a small quantity of bread, crackers, rice, and little animal muscle, or other simple kinds of food, with water, milk, or other mild diluent drinks, omitting every thing that contained alcohol. Within a few weeks my health began to mend, and, at the end of one year, I was able to return to arduous duties, demanding constant exertion of both body and mind. My frame, naturally vigorous and elastic, gradually recovered its tone, and now, thirteen years after the period of my greatest depression, I am able, upon a simple but common diet, consisting of the most usual articles of food, taken without any use of alcoholic stimulus, to perform constant labour in my profession, with much public speaking, and I sustain no inconvenience, except the fatigue which sleep removes, as in the case of other healthy persons.

"I was, from childhood, constitutionally prone to bleed at the nose, and sometimes to an alarming degree. After the recovery of my health, I allowed myself to use, with much moderation, the best bottled cider, at dinner only. After abstaining from it for a few weeks, on a long journey, (because cider of a good quality could not be obtained at the taverns,) my nose-bleeding ceased, and with it the vertigoes and confused and uncomfortable feelings of the head and nerves, by which I had frequently been troubled. Thinking that cider might have been concerned in causing these effects, I have never returned to its use, and for nearly three years, since I omitted cider, I have had no serious recurrence of these affections.

"P.S. In two other cases, within my knowledge, nose-bleeding has ceased by the omission of cider. In one of these, the bleeding was excessive and dangerous. The individual last referred to is a very athletic man, of full habit, and sanguine temperament."

Charles A. Lee, M.D., of New York:
 "When the temperance reformation began in 1826, it found me, as it did a large majority of my fellow-citizens, addicted to the moderate use, so called, of alcoholic liquors. I took brandy with my dinner, not only as a corrective of the bad qualities of our water, but principally to aid digestion; and fermented drinks, in conformity to the hospitable laws and regulations of society, and also to furnish strength and support under fatigue, and those other numerous circum-

stances, which were then supposed to justify and even require their use. It is true, I had many misgivings, as to their utility, but I had never duly considered the influence, which my habits might have upon my physical and intellectual well-being. I had never properly appreciated the importance of this study, so much neglected, and yet so essential to our welfare, as well as the progress and ultimate triumph of temperance principles. I had then been labouring under confirmed dyspepsia, since the second year of my college life, 1819, and had experienced a full proportion of the nameless bodily and mental horrors of that protean disease. My lungs were so weak, that I could with difficulty speak aloud; my nervous system was deranged and shattered, and my general strength so reduced, that slight exertion caused much fatigue. I was constantly troubled with headache, and depression of spirits, and an incapacity for mental effort. My other symptoms I need not particularize, as they were such as are generally found connected with this complaint. As soon as my attention was particularly directed to the effects of ardent spirits, which was in the year 1827, I formed the resolution of abstaining from their use. I acknowledge it was no sacrifice to do it, as I never had used them but in a moderate manner, and as, moreover, I reserved the privilege of drinking wine, beer, and cider, under the conviction that they were innocent, and, at times, even necessary. A careful observation of their effects, however, soon satisfied me, as in the case of distilled spirit, that I was invariably injured by their use, and I gradually came on to the plan, which ought to have been adopted at first; namely, total abstinence. I have thus tried alcohol in most of the forms in which it is used, and under the circumstances in which it has been supposed to be innocent, if not useful, and I can conscientiously say, that I have never received any benefit from it. As a restorative, in cases of fatigue, it was truly 'a mocker;' appearing for a short time to give strength, but always inducing greater lassitude and debility, when its first effect had subsided; and placing the system in that condition in which it could not sustain extra exertion, without great exhaustion. After abandoning the use of alcoholic drinks, I found my general health improved, my dyspepsia vanished, my hypochondria and headache disappeared, and my strength much increased. I could not doubt that this beneficial change was owing to my abstaining from these stimulants; for my habits, with respect to exercise, diet, &c., were the same as before. I was also enabled to apply myself to study with pleasure and without headache, which I have scarcely been able to do for several years. When fatigued, which is very seldom, I find a glass of water, or milk and

water, or lemonade, a much better cordial than any kind of intoxicating liquor ever was. I can also bear heat or cold better than formerly, and am not liable to get sick either from exposure or over exertion. While under the old regime, I had frequent attacks of illness, and some of a serious nature; but since I have adopted my present course, I have not found occasion to take a particle of medicine, nor have I been confined to my bed a single day."

William A. Alcott, M.D., of Boston, Mass., author of the Young Man's Guide, and editor of the Moral Reformer, Parley's Magazine, &c., &c.: "At thirty-two, I abandoned all fermented drinks. Before I discontinued the use of narcotic and intoxicating drinks, I was threatened with consumption; this tendency still remains, but is every year diminishing. My general health has greatly improved. I think my constitution, of both mind and body, more juvenile than six years ago. For six years past, all my senses, except hearing, have greatly improved; but my hearing still remains the same. My taste and my sight are remarkable. As to taste, water, formerly so insipid, has now a surprising sweetness. I must add, in closing, that many circumstances in which I have been placed, during the last six years, have been far less favourable to health than formerly. I was bred to the farm till twenty-four years of age, and accustomed to much exercise in the open air. Since then, I have at times greatly neglected air and exercise; yet, I have performed excessive labours; enough frequently for two ordinary men. I have studied much by night, or rather morning, for I rise at three or four o'clock all the year round. I have lost nothing by my temperance, but have gained immensely—a species of property, too, which worlds of extraordinary stimulants would not now induce me to part with."

The Hon. Theodore Frelinghuysen, late United States senator, and Chancellor of the University of New York: "I have been favoured with your circular, requesting the results of my experience in the matter of entire abstinence from the use of intoxicating liquor, and, especially, as to its effects on my health,—on bodily and mental ability, and the feelings of the mind. I can, from personal experience, bear decided testimony to the happiest results, in all these particulars, arising from entire abstinence. For the last nine years I have wholly abstained from ardent spirits, and habitually from all fermented liquors. The last year, which has been the period in which I have relinquished even the occasional use of wine, I have enjoyed better health than in either of the nine. And it is an interesting and grateful fact to me, that protracted and severe mental efforts can now be borne without weariness; bodily exercise and

labour are refreshing; and the mind is far more cheerful, composed, and self-possessed than in the days of infatuation, when the spirits and wine-cup met us on every side-board, and assailed us at every table."

Edward C. Delavan, Esq., chairman of the Executive Committee of the New York State Temperance Society, of Albany, N.Y.: "Several years have now elapsed since I practised total abstinence; and, during that time, my health has regularly improved. For more than twenty years I have been severely afflicted with chronic and most obstinate constipation of the bowels; and, at times, to a degree that almost deprived me of comfort. My physician assured me, that from original temperament, or confirmed habit, or the combined influence of both, he had no expectation that I should obtain any thing more than temporary relief by the use of medicine. But I can now state, and I do it with sincere gratitude, that since I have abandoned alcohol, under all its various disguises, and substituted cold water as my only beverage, I have been gradually and constantly improving in this particular, and that I have now scarcely a vestige of the complaint remaining. During the year past I have sustained greater mental effort than at any previous period of my life, yet my health has steadily improved; and I recently ascertained that, during the same time, I had gained in weight nine pounds seven ounces more than I ever weighed before."

William Ladd, Esq., of Minot, Maine, secretary of the American Peace Society: "I have discontinued the use of ardent spirits for about five or six years, and the use of all intoxicating drinks for about two years and a half. My health has been gradually improving ever since, and is now perfectly good; but I cannot say what effect the abstinence from intoxicating liquors may have had upon it. The 'effect on the capability of making great and continued efforts of body and mind,' has been decidedly favourable. I can do nearly double the mental labour which I could formerly. On the whole, my enjoyments, both mental and bodily, are much increased by abstinence from all that can intoxicate."

The Right Honourable Earl Stanhope: "I adopted the practice of total abstinence from all intoxicating liquors towards the close of the year 1831, when I suffered, as I had done occasionally, from a weakness of the stomach and a want of appetite. Since that time, I have steadily adhered to that habit, and I find that my general health has, in consequence, been very much improved, and that it has very rarely been requisite for me to take any medicine, and then only such as is mild in its nature, and moderate in its quantity. The powers of my digestion are vigorous, as well as my appetite, and I never feel heavy or heated

after dinner, but am as fit for bodily and mental exertion in the evening as I am in the morning. Although I often expose myself to all varieties of weather, I hardly ever catch a cold, and the complaints to which I am sometimes, though very seldom subject, never assume an inflammatory character. My bodily strength is increased, instead of being diminished, by drinking only water, and I consider that my mental faculties are far less liable to be disturbed than was formerly the case.—From the numerous advantages I have received, notwithstanding my advancing years, I cannot too much recommend water drinking for the health and strength both of the mind and of the body, and consequently for the enjoyment of life, and for the performance of its duties. I am aware that spirituous liquors may seem to give a temporary stimulus to the strength and to the appetite, but in both these respects they are very injurious; for the body is thus urged to exertions which are beyond its powers, and which are followed by exhaustion and debility; and the stomach may thus receive more than it is well able to digest. It is a very salutary, and, as I have found, a very important precept, not to eat to the full extent of the natural and usual appetite, and, of course, then more caution is necessary when the appetite is factitious and exceeds the powers of digestion. The stimulus which such liquors may, for a time, give to the spirits, is also prejudicial, and is followed by corresponding depression; but I have derived very great benefit by taking an effervescent powder, like that of lemon and kali, when in a state of lassitude, or when the spirits required to be revived.”

John Rundle, Esq., M.P. for Tavistock: “I have practised total abstinence from all intoxicating drinks since the 18th of Nov. 1837, and have great reason to be grateful for the excellent health which I have had during that period. I have sustained great exertions, both mental and bodily, and I have been exposed to all weathers, without ever having felt any inconvenience from the want of the stimulants, so frequently, and, as I believe, so injuriously, resorted to under such circumstances. It is fair to say, I have not made much sacrifice. I was never addicted to intemperance, and I have now lost all desire for what many regard as the enjoyment of intoxicating drinks.”

J. Brotherton, Esq., M.P. for Salford: “I have now abstained from all kinds of intoxicating liquor more than thirty years, and am happy in being able to state, that I have enjoyed excellent health during that period, and it is well known that my life has not been an inactive one, either as regards physical or mental exertion. I can bear testimony to the good effects of abstinence in a great number of instances which have come under my own personal observation.”

The Rev. John Collinson, Curate of Lamesley: “For some years I found my health gradually declining, and as I am upwards of sixty years of age, I laid it to the account of advancing years, when we may all of us be looking forward to the solemn change that must consign our bodies to the dust from whence they sprung. I was led to believe that my constitution was breaking up, and that I was going down, step by step, to the grave. But I was in some degree mistaken. It was not so much advancing years, as another, and more fatal enemy—one that casts down the young as well as the old—that was wasting my strength, and dragging me to my tomb. I have always, even from my youth, been a very moderate drinker of wine, or other liquors that contain spirit, but yet I did occasionally take such a quantity as most gentlemen, who are never guilty of excess, indulge in; but I had often remarked, that I never remembered to have received the least benefit from wine in my life. About five years ago, my constitution grew so weak, that I may say I was never at that time for a moment comfortable. I felt no pleasure in taking food, and could not digest the little that I did take; and I was always so giddy after dinner, that, when I rose from my chair, I was in danger of falling to the ground. From some observations that I made, I discovered that I was always worse than usual after I had taken wine, and in proportion to the quantity I had taken. Here was a discovery that had not been divulged to me by the Temperance Societies (for I really knew nothing about them at that time). I resolved to drink no more wine, or at least no more than the customs of society forced upon me without appearing singular; and I found so much benefit from it, both mental and corporeal, that I determined to advance a step farther, and break through all the drinking customs of society, and take none at all. I withstood the persuasions of some, and, what was far more difficult, the ridicule of others, and my reward was a rallying constitution and comparative comfort. But I was not yet exactly what I ought to be; there was still something to be done before I could say I had such health and strength as was not unreasonable to expect at my time of life. I had given up wine, and had found the benefit of it, but I still took malt liquor at my dinner, and even a glass afterwards, if I was thirsty. And can this, I asked myself, be the bar that keeps me from perfect health? I will ascertain this point, and for a time try nothing but plain water. I did so, and the problem was solved. Ha! have I found thee at last, O, mine enemy! Away, away, everything that has the least tendency to inebriate, and leave me in health and comfort! From this time, I gradually improved in health; and I am now, thank God, as healthy as most, and

healthier than many, men of my age. I seem to have gone back in life ten years; and although I well know what must be the end of time's rapid flight, I yet feel, that, latterly, instead of advancing to the grave, I have been marching stoutly from it. As it regards my improved capability for mental exertion, it is surely unnecessary to say, that a man who has got rid of bile and indigestion, and giddiness of the head, must have a much clearer understanding, and be better able to exert it, than before. In fact, you may give me credit for all the improvement, in this respect, the circumstances can fairly warrant."

The Rev. Francis Close, M.A., of Cheltenham: "The question is, are the associations for total abstinence consistent with the principle of revealed truth? That the individual practice of total abstinence from all intoxicating drink is so, there can be no doubt; that such a practice is congenial with health, morals, and religion, I am most fully persuaded. Having tried it myself for the space of one year, and having consulted some of the most eminent of the faculty, I am fully persuaded every intoxicating beverage, as existing in the present day, is, in most cases, either a useless and expensive luxury, or actually injurious to health—stimulating but not strengthening—exciting only to occasion a collapse, which must be met by a new excitement. I firmly believe that every person who sets an example of total abstinence will benefit alike himself and his fellow-creatures."

Rev. Septimus Ramsay, M.A., Minister of St. Michael's, Burleigh-street, Strand, and Secretary to the "Upper Canada Clergy Society": "By way of trial, I have four times abstained from all intoxicating beverages for a month each time, and then for the same period took a moderate quantity of malt liquor, or wine, and I now am able to give an opinion on the subject, founded on my own personal experience. I have tried both systems, and therefore am better qualified to judge than those who have only tried one. Whilst I drank nothing stronger than water, I could decidedly go through more fatigue, both bodily and mentally, than on the moderate system: I felt stronger; the body was in a much cooler state, and less irritability in the system altogether."

The Rev. David Charles, Bala, Wales: "To the beneficial results of the practice of total abstinence from all intoxicating liquors, the experience of thousands of my fellow-countrymen bear ample testimony. As far as regards myself, I can safely testify, that my health is certainly stronger, and my capability, both of bodily and mental exertion, considerably greater at present than at the time when I used those liquors moderately. As an instance, I might mention that I had, in the depth of last winter, to travel for upwards of a fort-

night, and to preach three times every day during the same period; still I was able to undergo the labour and exertion with comparative ease, and never felt the want of anything intoxicating. I have conversed with many ministers of different denominations, both young and aged, and they universally acknowledged, that they have been better able to sustain the arduous duties of the ministry (to some of whom they must have been truly laborious) since they have totally desisted from the use of intoxicating liquors, than before. Very many others, also, in different situations in life, have I met, and received their confirmation of the above important truth. I am happy in being able to inform you that the cause is still prosperous in many parts of our country. A few days ago, I received a pleasing account of a beer-house being turned into a house of worship—Dagan having fallen before the ark of God. It was opened with prayer and praise at an early hour on a Sabbath morning, and a reformed drunkard was the preacher on the occasion. Thus we see the cause of the blessed Immanuel prospering; and, provided we persevere zealously and faithfully, I have no doubt but that we shall have to tell of greater triumphs than these. We have the honour and privilege of preparing the way of the Lord—this done, we may expect his coming with power and might. That every idol may fall before him, and that the glorious day may arrive, when he shall be acknowledged as Lord and King by all nations; and, towards this, that the good cause, in which we are embarked, may continually and increasingly prosper, is my sincere and earnest prayer."

The Rev. Thomas Swan, Birmingham: "I am most happy to bear my humble testimony to the benefits resulting from total abstinence from all intoxicating beverages; I have practised it for more than two years, and never was better,—never felt so little fatigue after those arduous labours in which I am constantly engaged. It is true, I never took much, only a little ale in the evening, and two or three glasses of wine on the Sabbath; but I am decidedly better on Monday than I used to be, and am almost entirely freed from a spasmodic affection to which I am liable. From my heart I wish all intoxicating drinks were used only as medicines; then the church would arise and shine in glory, and the world soon be renovated. A dear friend, one of my respectable deacons, his lady, and most of the members of his family, have adopted the plan, and they rejoice in the benefits of it every day. He is very zealous in the cause. I wish you much success in this great work. This is the only reform, I am persuaded, that will benefit the mass of the people."

The Rev. James Sherman, Minister of Surrey Chapel, London: "It is now six

years since I began wholly to abstain; and though these six years have been the most laborious of the whole of my life, I have not had occasion, though often recommended, to return to the moderate use of intoxicating liquor. I can individually and relatively speak well of abstinence. As a family, few enjoy better health, scarcely ever requiring the aid of medicine or a medical man; and the instances in my own church of wretches rescued, and exalted to happiness and usefulness, first, by adopting the plan, and then attending the house of God and listening to the gospel of salvation, cheer my heart in my ministerial labours, and make me anxious that multitudes more of my brethren should adopt and carry out the system."

The Rev. J. Burns, Minister of Aeon Chapel, New Church-street, St. Marylebone: "Since I have abstained from the use of fermented drinks, I have been able to attend to all my labours, both of mind and body, with much less fatigue than formerly. I am now entirely free from the painful sensation of thirst, especially after the labours of the Lord's day. My material system is several pounds heavier than at any previous part of my life, and I enjoy great comfort of mind from being identified with the great temperance movement, which, I trust, is destined, by the blessing of God, to be the precursor of a great and mighty change in the moral and religious aspect of our country."

The Rev. Thomas Waterhouse, of Huddersfield, Minister of the Methodist New Connexion: "It is nearly three years since I first received the temperance pledge (having previously acted upon the principle some months by way of trial), and after that lapse of time I do honestly affirm that I have found the self-denying practice to be of great advantage to me. I can walk with more ease, read, I think, with more satisfaction, and preach with less fatigue than formerly; especially, I do not feel, after the laborious services of the Sabbath, that weariness and listlessness in my system on the Monday, which I constantly felt when I occasionally partook of intoxicating drinks. If ministers of the Gospel would act decidedly and perseveringly upon the principle above recommended, I am fully persuaded they would not only derive incalculable advantage in body and mind, but such conduct would prevent their worldly conformity to a considerable extent, raise them greatly in public estimation, and render their ministerial services more evidently useful in the salvation of souls."

J. Dunlop, Esq., one of Her Majesty's Justices of the Peace for Renfrewshire, and author of "The Compulsory Drinking Usages of Great Britain," &c.: "From my youth upwards I have been affected with dyspepsia, or want of digestion, bile, flatulence, hypochondria, acidity, and all the

evils that arise from a naturally defective state of the stomachie organs. This has sometimes risen to such a height as to prove very serious, and to become painfully distressing for months, and even years, without material intermission. For a long time I was taught to believe that a certain moderate portion of alcoholic liquor was absolutely necessary, in my case, to the functions of life; I now believe this to have been a great mistake. I have found no bad consequence to arise from becoming totally abstinent. I confess the change was for some time a painful struggle, but that being over, I am fit for more exercise and business, and am more vigorous both in body and mind; but, what most people would doubt, I enjoy more animal gratification now than I used to do, when I daily made use of alcoholic stimulants."

Joseph Eaton, Esq., of Bristol: "It is now nearly four years since I entirely relinquished the use of intoxicating drinks.—My health at that time was much impaired, and was in a state that would be generally regarded as requiring wine, or some stimulant of a similar character; and, with this conviction, I had pretty regularly taken some, at least twice a-day, for many years. For some months immediately afterwards, I was occasionally engaged in travelling, and whilst pursuing that healthful avocation, I found considerable benefit from my altered mode of living. During some extremely hot weather, I was scarcely sensible of thirst, while others were suffering much from it, and were constantly drinking. I also endured the cold better than before, but the greatest immediate advantage I experienced was, that of my sleep being much more sound and refreshing. After a time I found, also, that a palpitation of the heart, which had previously been increasing, and was becoming of an alarming character, almost entirely ceased. This is the credit side of my account with total abstinence; but about twelve months from the time I altered my mode of living, I began to suffer considerably—my flesh wasted away, and my spirits and strength failed to such an extent that I became seriously alarmed. After trying bitters, and tonics, which were not of the least service, I had recourse, as soon as circumstances would admit, to the natural and best stimulants,—travelling and exercise in the open air,—and by this means, under the divine blessing, my health was restored, and it has continued much the same as it was before I acted on the principle of abstinence; but having been favoured with a continued exemption from palpitation of the heart, I am pretty well satisfied that any apparent benefit I might derive from an alcoholic stimulant would be purchased at the expense of an over excitement of some parts of the system; and that it is best, on the score of health, to continue my present course, and

put up with occasional feelings of depression."

John Cadbury, Esq., Birmingham: "The result of my own six years' experience is, that total abstinence from all intoxicating drinks has conferred real and substantial benefits on my health, mentally and bodily. Before adopting this plan, I was a very moderate wine drinker, averaging not more than two wine glasses a day, and I was altogether unconscious that any possible inconvenience could result from it; on the contrary, I seriously believed that my constitution required this daily stimulus to assist in supporting me through the usual avocations of life. In all this, however, I have learnt, to my happiness and comfort, the great delusion under which I then lived. Instead of suffering frequently from languor, irritability, and, at times, highly susceptible nervous feelings, with comparatively little relish for food, particularly at breakfast, I can now gratefully and I desire humbly to acknowledge, that all these unpleasant sensations have, in a great degree, subsided. My health, which at the time referred to was very fluctuating, has since been uniformly good, even robust. Languor, from which I suffered greatly, is unknown to me; and, as to exertion, I remember no period of my life when I could undergo so much with so little fatigue. I have for more than two years expelled every description of intoxicating drinks from my house (except it may be a little labelled poison in the medicine chest), and my wife and servants are ready to bear their testimony, in addition to my own, of the benefit they have derived from giving up entirely the use of alcoholic drink. My three children have all been nursed by their mother on this principle, and that to the evident advantage of both; nor can I withhold the pleasing intelligence, that my valued parents, each in their seventy-first year, have also, for many years, abstained from all intoxicating drinks, to the perceptible benefit of their health. In fact, of five families, consisting of thirty-nine members, only five continue the practice of taking wine or beer moderately, and these five are the most delicate and ailing members of the families: thus demonstrating, pretty clearly, that the water drinking system is well suited for the aged, middle aged, and young."

H. F. Cotterell, Esq., Bath: "I was from a youth very temperate, and particularly so of later years. The business in which I am engaged, that of a land-surveyor, requires a large portion of mental and bodily exertion. I have a large family mostly grown up, and now all (including my wife) are total abstainers, and have been so for more than two years and a half. I find my fitness for bodily and mental labour, of all kinds, greater than when I took intoxicating liquors in great

moderation. The digestive organs act better, they are very rarely discomposed, and when out of order, easily restored by very simple medicine. I sleep far better at night, but am not drowsy at any period of the day, as I used to be under ordinary circumstances—in fact, I think, I am more thoroughly awake at all times when out of bed. I have lost a painful feeling of nervous depression; but what has appeared to me most remarkable is, the facility with which ordinary colds pass away. I have had in the morning strong symptoms of a very bad cold, running of the eyes and nose to a great extent, accompanied with slight fever, all of which have been entirely removed in the afternoon. I am sure that my mind is more placid and serene, and better prepared to meet weal or woe, than when under the influence of small daily potations of beer or wine. Having disposed of myself, I will proceed to my family, who, in their various capacities, will bear the same testimony, except that some of them have hardly known the effect of strong drink, having been almost total abstainers from their infancy. My sons are strong, hearty, willing, and able to work; and, in fact, some of them do perform a very large quantity of labour, and their activity of mind is equal to that of their bodies. They are occupied in various parts of the county, and wherever their lot is cast, they not only do not keep their principles out of view, but are ready to embrace every suitable opportunity of spreading them. My dear wife, who was always of a weakly constitution, and considered a glass of wine daily as an absolute necessary of life, has found herself better without it, and has now no faith in it as a medicine."

John Surtees White, Esq., Solicitor, Depton, Durham: "At the age of 18, it was my misfortune, I might add, my curse, to be sent to the city of Durham, to serve my clerkship. I there soon acquired habits of intemperance which grew with my growth, and clung to me until about two years ago, when I came to the determination of abstaining from spirituous liquors. I experienced great relief in consequence; but about a year ago, I determined to abstain from ale, and to join the ranks of the teetotalers. Previous to my doing so, I was attacked, periodically, with rheumatic affections of the most violent kind, bowel complaints, &c.; but since I became a teetotaler I have never experienced one moment's uneasiness, or, with the exception of a cold, had a day's illness. Independent of this, I have felt clearer in my head, considerably stronger, more fit for business, and have, in every respect, become an altered man."

W. I. Morgan, Fellow of the Royal College of Physicians, of Dublin; President-Elect of the Bath District Branch of the

Provincial Medical and Surgical Association: "Always temperate myself, it was no privation to me to unite with dear friends in the formation of one of the first, if not the very first, of the temperance societies in Europe: but I soon perceived that half-measures could not effect the great objects which we had in view. And now, as a member of the total abstinence society for more than twenty months, I give this my honest and unsolicited testimony, that, since I was induced by my own convictions to unite with the teetotal society in their godlike attempts to benefit—not the drunkards only, no, but—the millions more or less enthralled by the seductive enjoyment of what they call their moderate cup, I have experienced health and strength of mind and body, and that life, and liberty, and gratitude, which a patient enjoys, when, now re-established in health, he has ordered all pill-boxes and bottles to be banished from his premises, and, with the consciousness of a sane, and healthy, and independent man, he resolves, in future, with the blessing of God, to live upon food and not upon physic."

John Burrows, Esq., Great Orford-street, London: "I have never been in the habit of taking, moderately, even, daily potations of wine or fermented liquors; I once took the third part of a pint to dinner, for two months; and, small as it was, I never drank it without feeling, in a short time after, drowsy, lethargic, and almost an entire incapacity for reading or studying with advantage. Being myself of a delicate constitution, I have been urged, by friends and relatives to take it medicinally, at the ratio of two glasses a day; but, whenever I took it, if discharging the toilsome duties of my profession, it was followed by distressing belchings of flatulency from the stomach, which would continue for one or two hours' depressing languor, hurried and difficult respiration, and a sensation of weakness and weariness in the lower extremities. From all these troublesome sensations I am exempted by drinking toast-water. I have learned, from my own experience, and the observations and inquiries I have made respecting other total abstainers, men and women of every grade of society, some in very affluent circumstances, and others following the most laborious employments, viz., sugar-boilers, furnace-keepers, iron-moulders, smiths, forgers, engineers, carpenters, brick-setters, sailors, butchers, fishers, chandlers, labourers of various classes, agriculturists, farmers' servants, and workmen, that man, in health, whether he be delicate or robust, phlegmatic or sanguine, bilious or melancholic, does not require the daily, nor even the occasional, moderate use of alcoholic liquors. I am fully convinced that a bounteous Providence has amply provided a rich and grateful variety of nutriment, in the shape of food,

adapted to the diversified wants and constitutions of his intelligent creatures, which will render them more adequate to the toilsome and laborious duties of their respective callings than they would be were they to avail themselves of any of the misnamed alcoholic strengtheners. I have examined more than four hundred persons individually, of various callings, some of whom are exposed to all the vicissitudes and inclemencies of the revolving seasons, regarding their health and strength, and endurance of labour, since they became abstainers, and they have unanimously declared, that they are now stronger, more lively and vigorous, and bear the fatigue of labour better, than when they partook of stimulating beverages."

James Higginbottom, Esq., surgeon, Nottingham: "I am one of those very fortunate beings, who was never taught to drink intoxicating drinks when a child, and can never recollect having the least desire for them. When about eighteen years of age, I made a most determined resolution never to take intoxicating drinks during life; making, at the same time, three provisos, which I thought then necessary; namely, the Lord's Supper, sickness, and old age. When designed for the medical profession, an old aunt was quite indignant at the thought, saying, 'I was too delicate a boy; that she was sure I could never endure the night-work and fatigue of the medical profession, and that my father ought to have put me to his own profession, the law.' It is now thirty-two years since I made my resolution, and I can vouch for the blessings arising from abstaining from all intoxicating drinks, and that it has been my greatest temporal blessing. More than twenty-five years of that period I have undergone very great mental and physical exertion, loss of rest, and extremes of heat and cold: my mode of visiting my patients was generally one half the day on horseback, the rest on foot. At an early period of my practice, my labour might be said to have been continuous, not having had one day of relaxation for twelve years; and my loss of sleep almost incredible, having, at one time, only six entire nights' sleep during five weeks, and out of one part of that five weeks only one night's sleep in nineteen nights. When I consider my labour and loss of rest, I am fully assured that had I taken an exhausting stimulus, such as alcoholic drinks, and had not been a cold-water man, it would not have been possible for me to have endured such physical exertion, even had I possessed a robust constitution. About twenty years ago, by persuasion of friends, and by the prescription of an eminent physician, now residing in London, I took a glass of sherry wine daily, for a short time, with the view of supporting, as it was then thought, the great wear and tear of my sys-

tem. I found this plan produce fever, loss of appetite, and loss of strength, and I have never tried so dangerous an experiment since. My health, during the whole time, I may say, has been good. I have been twice confined from very severe attacks, arising from punctured wounds received in dissecting in the years 1813 and 1819. From the extreme rapidity and severity of both attacks, I have every reason to think I must have been numbered with the dead had I not been an abstainer. In February, 1837, I had the influenza, which required very active depletion; indeed, much more so than the disease generally admitted of: under this severe disease also total abstinence stood, through Providence, my very good friend, so that I owe, instrumentally, three lives to that blessed system."

John Jones, Esq., Surgeon, Ilfracombe, Devon: "I have rigidly observed the principles, during the last four years, and, though never accustomed to the free use of fermented liquors, language would fail me to convey to you an adequate idea of the comforts and happiness it has afforded me, and those of my household who have adopted the principle. I am actively engaged in the duties of a laborious country practice, requiring great exertion both of body and mind, and I have no hesitancy in asserting, that, during the time I have totally abstained, I have been fully capable of enduring double the exertion and application, without experiencing half the fatigue; my physical health has undergone an immense improvement, being, prior to my adoption of the principle, subject to annual inflammatory attacks. I have subsequently enjoyed the most robust and uninterrupted health. This very great and important effect I have also witnessed in not less than from forty to fifty middle-aged men in our town, who were some time since the subjects of dyspepsia, and various other chronic diseases, and who have obtained entire relief by the adoption of our pledge, and are rejoicing in the victory they have achieved."

John W. Morley, Esq., Surgeon, Horn-castle: "I have been a total abstainer from all intoxicating liquors for nearly two years, and am happy to say my health, in many respects, has very much improved. I am convinced if I had continued my two glasses of wine and my glass of ale daily, I should have shortened my life some years, for I was scarcely ever free from headache; and, since I have been an abstainer, I have had no pain in my head worth mentioning. My father, who lives with me, and is now seventy-four years of age, is very strong, and enjoys much better health since he became a teetotaler. He says, he can walk more miles now than he could ride on horseback when he took strong drink. His only diluents are tea and coffee for breakfast, and

water, which he finds more beneficial, at dinner, than any other fluid. He rarely took more than two or three glasses of wine, or a glass of ale during dinner, and this, he says, caused him much embarrassment in breathing; but since he has discontinued all strong drinks, he can breathe well, and walk twenty miles in a day without inconvenience. His mother was a very temperate woman, and died at the advanced age of 102 years. My two sons are young men, and are total abstainers. They have been so for nearly two years. They enjoy better health, and can endure many hours of deep study during the day. My servants are teetotalers, and enjoy good health, seldom requiring medical aid, which was not the case when they were allowed strong drink."

Mr. Bassell Smith, Schoolmaster, Birmingham: "Towards the close of 1835, I became a member of the total abstinence society; previously, I had taken intoxicating beverages (with occasional exceptions) in great moderation. The result of the change has been, I conceive, most favourable. I had long been subject to violent headaches, particularly towards the close of the day, in the summer months, and frequently to great depression of spirits. Shortly after the commencement of my abstinence, I suffered from a severe determination of blood to the head; but, from the time of my recovery to the present, I have been a stranger to continued headache, and have but rarely experienced even slight attacks. My spirits are more even and composed, my head cooler and clearer, my nerves firmer, my faculties more collected, and my health and strength improved. Having daily to endure about nine hours' arduous and almost unremitted mental toil, and possessing one of the strongest constitutions, I am not such a trophy of the principle as some others, yet my case is an encouraging one."

II. *Testimonies of agriculturists, mechanics, and other artizans engaged in arduous labour.*—The following testimonies of agricultural employments, however arduous in their nature, being performed without the aid of inebriating drinks, are selected from numerous other similar documents:—

Bideford, Devonshire.—"Harvest work, as well as other hard work, is done better without the use of strong drink than with it. This has been tried in all the surrounding parishes in the past harvest. In one parish, where two years ago only one small farmer acted upon the principle of total abstinence, and refused to give strong drink for his harvest work, this year (1842) one half of the farmers have acted upon the principle of giving their men teetotal beverages; and those who have brewed for the harvest have not used one half the quantity they used in former times; and all

agree in stating, that their work is done better than when using strong drinks in their harvests. We could enumerate numbers of instances in our district that will go to prove the entire uselessness of the drunkard's drink in laborious employments, and the improved health and happiness of those who abstain."

Another writer, from the same place, remarks: "Many persons have worked during the harvest without beer, or any other intoxicating drinks; and a very respectable yeoman told me in the market, last Tuesday, that he had never done so much harvesting for years as in the past harvest, and he used none of the drunkard's drink about it." Again, a third writer from the same place says: "I have now worked three harvests without the use of intoxicating drinks, and I have not met with any man that could put me by either in reaping or pitching to mows. In 1839, I reaped ten days, in 1840, seven days, and for different farmers, and in several parishes, and in 1841 I have pitched about fifty tons of hay, and reaped five days; if any difference, I have worked this harvest the best of all."

Litcham, Norfolk.—"We have about twenty of our friends who have gone through the harvest, without any assistance of strong drink whatever, and declare they never did their work with such ease before. Four of them were singly placed in four different companies, and had to stand the contests, both in work and language, against their companions; but their masters have behaved with great indulgence to them, by ordering them coffee when they pleased to have it. In one instance, a man at Weasingham, weighing about nine and a half stone, was placed to pitch corn with another weighing more than twelve stone, and younger, a very unequal match; but the teetotaler was always the best man at night, and most fit for work in the morning."

Glynn, near Bodmin, Cornwall.—"In 1842, on the estate of Lord Vivian, "One hundred acres of grass were let by the steward to a few mowers to cut. One of the number, happening to be a teetotaler, addressed his comrades when entering on the second day's work, and asked them why they could not do the same as he did, and get through their work without spending so much of their money in strong drink. Having had convincing proof that the work could be done, they determined on making a trial, and forthwith commenced their work on teetotal principles. They got through their job with much ease and comfort to themselves, and on reckoning up the cost of their tea, coffee, &c., consumed while cutting the hundred acres, they found it amounted to but a trifle compared to what they used to spend in drink. Of course they were able to get a larger quantity of substantial food. The men afterwards expressed themselves

much gratified at having made the trial, and declared that they never felt so comfortable after their harvest work. Many farmers in these parts have all their work done without giving any intoxicating liquor. In one or two cases large iron fountains have been taken out into the fields, and the tea or coffee kept hot with a fire put underneath. This is an easier mode than sending it out in jugs or kettles, a little at a time."

Hertfordshire.—Captain Trotter of Dysham Park, near Barnet, whose efforts in behalf of temperance, and other benevolent associations, entitle him to the regard of the Christian and philanthropist, adds the following additional testimony, written in May, 1841: "Having tried the system of total abstinence last year, during the hay season, with my men, I have found it answer, in every respect, perfectly. I had my men from Bedfordshire, and having calculated the expense of the former allowance of beer per day per man, I gave them exactly the same amount in money, and my bailiff assures me, that nothing could be more regular than the men; and on a Monday morning, instead of being weaker as formerly from the effects of Saturday's and Sunday's drinking, they were refreshed and stronger than ever. That he never had an angry word during the whole season, and never heard an oath; and such was the success, that I shall never have any more beer in my fields, and I know that I shall be as much benefited by the steadiness of my men as the men will be by the saving of their constitutions and money. Many persons came during the hay season to see the dinners go into the hay fields, which one of the men cooked, at their expense for his time; and instead of cans of beer and a little bread and cheese, a large wheelbarrow-full of roast or boiled meat, in large pans, and potatoes, &c., &c., and a pail-full of coffee, were sent to them. At the end of the day, instead of going to the ale-house, the men read a chapter of the Bible, united in prayer in the barn, and then lay down to rest; and it really was a scene upon which I look back with great delight. Two or three of my neighbours tried the same plan with similar success."

Almondsbury, Yorkshire.—Mr. Josiah Hunt relates the following interesting particulars on the same subject; the experiments were made in 1841: "On a farm which I occupy, several miles from my residence, I have for several years had the mowing, harvesting, and stacking of the hay there done by labourers at 8s. and three gallons of cider per acre, together with the occasional assistance of the man on the farm, being equivalent to 8s. 6d. an acre, and the drink. Last year I also let my hay-harvesting at home, of seventy acres, to six other labourers at the latter-mentioned terms. During the past spring I came to the determination not to

pay for any labour with intoxicating drink, and on acquainting the party who again applied to undertake the mowing, &c., on the distant farm, of this, he asked 3s. per acre, instead of his accustomed drink, which, being about the usual price, I consented to leaving him at liberty to purchase such drink as he pleased. On the home farm, I let eighty acres of grass to mow, harvest, and stack, to four of those who did the like last summer, with three others, at 8s. 6d. an acre in money, as last year, and, instead of 3s. an acre for drink, an equal sum to be expended in the purchase of unintoxicating drink and food, on condition that neither of them should taste any fermented liquor during the progress of the work. Three of the men had signed the pledge in the previous winter, the other four did so about a fortnight before they began the work. They commenced on the 10th of 6 mo. (June), and finished on the 26th of the next month, which was longer by two weeks than they would have been, had the weather proved fine. The whole of the work, without the least exception, was performed more to my satisfaction than ever was the case before. During the progress of it, they gave abundant proof that they were equal to as much work of any kind as any seven men in the neighbourhood, and also to as much as they themselves had been equal to at any time whilst taking intoxicating drinks. They were not picked men; four of them of about the respective ages of fifty-five, forty-one, thirty, and twenty-nine, having worked for me for several years, the other three, aged about forty-one, thirty, and twenty, having been engaged at various times in the spring, without any intention of retaining them during the summer; and that they are not of more than average strength may be inferred from the fact that I was told, before they began, 'We know very well how your experiment will end, for there are but two men out of the seven that can do a day's work; they will be knocked up before they have mowed two hours.' At the end of the first day's mowing it was, however, found that they had done more than any other men in the neighbourhood, and as they thus proceed without being 'knocked up,' the tables were turned, and I was then told that they performed so well in consequence of their good living. How this was obtained, I propose presently to show, but, before doing so, I must, in justice to the men add, that their conduct during the summer has presented a striking contrast to much that I have witnessed in ale and cider drinkers. I have not heard an improper expression escape either of them during the whole period, and their general behaviour has been very creditable.

"Instead of intoxicating drink, they used tea and cocoa, sweetened with sugar or treacle, and skim milk, supplied by myself.

The following are the quantities used, with the cost, viz.: 2lbs. of tea, 22lbs. of cocoa, 31½lbs. of sugar, 4¼lbs. of treacle, 60 gallons of skim milk; all of which cost £3 12s., instead of, as at the rate of last year, £12. My object being to carry out a great principle, I consented to their beverage being made on the premises, but they might easily have provided themselves with a supply for the day at their respective homes before coming to work.

"The required supply of drink having, as above shown, cost but £3 12s., there remained £8 8s. to be expended in food, and for 1s. more than this sum, or £8 9s. they were enabled to procure the following, viz.: one hundred weight of beef, one hundred weight of bacon, four sacks of potatoes, and one sack of flower, with 20lbs. of suet for puddings; all of which 'good living,' be it remembered, was obtained out of the saving effected by the substitution of an unintoxicating drink for the intoxicating and expensive one of the previous summer."

Sir Francis Mackenzie, of Gairloch, Bart., in a work recently published, entitled "Hints for the use of Highland Tenants and Cottagers," recommends, in warm language, the use of water as a beverage during laborious employments. In support of his remarks he adduces the following interesting anecdote: "An English contractor for the building the Canon Bridge informed me of his surprise at the exertion of the natives whom he employed, and that having contracted for excavating a canal in England, he engaged about twenty Highlanders to accompany him southwards. Several disputes occurred between those thus introduced and the native workmen, and many jeers passed relative to the fare (bread and milk) on which they were contented to exist, saving the greater part of their wages to bring back to their friends and families. To settle these bickerings, a match was made, and considerable sums of money betted, that twelve of the Highlanders could not excavate a certain number of solid yards in the same time as an equal number of the better-fed Englishmen. And every thing being fixed, a table was laid out with meat and ale for one party, whilst the other had no preparation for refreshment beyond what a can of fresh water afforded. But the point in dispute was, after a fatiguing day's labour, decided in favour of the Highlanders; and whilst the Englishmen were totally exhausted by their exertions, the former, full of spirits at their success, danced their national strathspey in token of victory. I give such instances to prove that the strength necessary for exertion does not depend upon a luxurious diet; but at the same time abundance of simple nutritious food is absolutely indispensable for our support, and to secure this much depends upon yourselves."

The Report of the Temperance Society for the city of Waterford, for the year 1841,

drawn up by P. J. Murphy, Esq., contains some powerful facts in corroboration of the above views: "The sawyers, particularly remarkable heretofore for their drinking habits, and who were therefore poor and wretched looking, and who believed that they could not enjoy good health without whisky to soak off the perspiration, are now a fine, cheerful, healthy, temperate class, well fed, and comfortably clad. They have also benevolent societies, on temperance principles, for their mutual support and comfort in sickness, and are now a credit to the society.

"In the iron foundries all the men are teetotalers, and though their labour is, perhaps, the severest of any, they are faithful observants. The men in the concerns of Benjamin Graham, Esq., and at Mrs. Williams's, were also among the first who joined, and they are among the first also in faithful adherence. They are a fine, healthy and industrious class, and a great credit to the society.

"The bakers also have distinguished themselves by their fidelity. It was formerly a mistaken maxim among them that they could not endure their labour without strong drinks. All now, with the exception of a small number, are teetotalers, enjoy good health, are well able to work, and much improved generally in their condition. They have a benevolent society for their mutual comfort and support in sickness; and the members are generous towards the poor, not only of their own society, but others." Again: one of the principal managers of the Cotton Factory of Portlaw, according to the same report, observes, in reference to the workmen employed: "We find all classes improved by the introduction of temperance, and all those who have hard labour, such as blacksmiths, iron mechan- ists, carpenters, &c., testify that their health

is improved, and that they can go through their work with more ease than when they used intoxicating liquors." Dr. Martin, physician of this factory for the last nine years, remarks: "That it has been found that the practice of total abstinence from intoxicating drinks is quite compatible with the labours of the people at the factory; that it has not produced any injurious effects, but, on the contrary, they enjoy better health, are better fed, and better clothed."

William Thompson, a sawyer, aged 39, in a communication written October, 1842, states, that he and his partner, both members of the total abstinence society, have walked seventy-two miles a week to their work for months together. "We can," he observes, "cut three hundred of elm sawing in ten hours, and home again, and not be half so much tired as we were when we took intoxicating drink and did half the work. We earned as much in the first seven months we were teetotalers as we did the twelve months before with the drink. We walk thirteen or fourteen miles some evenings after we have done our day's work, and we don't feel tired. I have walked seventy miles a week to meetings, after completing my day's work."

A writer in the neighbourhood of West Drayton, remarks: "A gang of brick-makers, in the employ of S. Watkins, made fifty-two thousand five hundred bricks in a week, without a single individual among them tasting a drop of intoxicating liquor. The average number of hours they worked every day was eighteen; and there was no complaint, at the end of the week, of languor or weakness, so commonly the results of drinking habits."

The following testimony of hard-working men is to the same effect:—

"We, whose names are hereunto subscribed, do testify, that we find ourselves bettered in health and circumstances by having adopted the practice of entire abstinence from intoxicating liquors, and we send you this testimony in hopes it may induce others to adopt the same practice.

Name.	Trade.	Period of abstinence.
Wm. Vickery,	Edge-tool-maker,	Four years.
Samuel Derry,	Warehouseman,	Four years.
Lazarus Vickery,	Edge-tool-grinder,	Four years.
Simon Joice,	Scythe-grinder,	Two years.
James Turner,	Mowed two summers,	Fifteen months.
Wm. Knapton,	Carpenter and millwright,	Five months.
Uriah Trowbridge,	Scythe-grinder,	Two years.
John Crees,	Scythe-grinder,	Two years.
Enos Turner,	Spade-steeler,	One year.
Henry Dyer,	Shoe-maker,	Two years.
Benj. Matthews,	Saddle & harness maker,	Five months.

"These persons are all known to me, and I can testify to their being constantly employed at good wages.

"WILLIAM VICKERY."

"Nunney, July 14th, 1841."

Forty-three bakers, tailors, carpenters, shoemakers, paviors, watchmen, straw-bleachers and blockers, housemaids, grooms, butchers, sawyers, bricklayers, dressmakers, surgeons, ministers, and others of various avocations, signed the annexed testimonial: "We, the undermentioned, members of the Dunstable society, having tried fully the total abstinence principle, can bear testimony to the advantages we have derived, and our ability to follow our usual avocations more efficiently without the use of any intoxicating liquors."

The annexed testimonial from Oswestry, signed by one hundred and thirty-one individuals, of various avocations, of whom seventy-eight had tried the principle for not less than three and a half years, and thirty-one from two to two and a half years, is equally strong: "We, the undersigned, having tried fully the total abstinence principle, can bear testimony to the advantages we have derived from it, and our ability to labour more efficiently without the use of intoxicating liquors." Among those who signed the above document were about twelve agriculturists who had worked several harvests on the principle, twenty-seven colliers, six blacksmiths, and numbers of labourers, lime-burners, carpenters, bricklayers, stone-masons, machine-makers, butchers, gardeners, farmers, millers, engineers, skimmers, waggoners, and workmen and shopkeepers of various descriptions.

G. S. Kenrick, Esq., late of the Varteg Iron Works, April, 1840, states the following facts: "Our society consists of persons employed in the iron-works, embracing a great variety of occupations, and I should say that about two-thirds of them are colliers and miners, who work very hard with the mandrel and sledge, for twelve hours a day, and these men keep their pledge well; they find themselves full as well in health, and capable of doing more work, for they lose no time in the public houses. There are many other societies at the iron-works, from here to Merthyr, to which the same observations will apply. I am in possession of declarations, signed by pudlers and firemen, from here to Merthyr, who have been teetotalers from two to three years, and who say they can do their work with more ease, and enjoy better health, than when they made use of the drunkard's drink."

The third annual report of the Searborough Society, published 1840, contains the following statement: "We have in our ranks, sailors, carpenters, fishermen, bricklayers, stone-masons, sawyers, shoemakers, tailors, whitesmiths, and many others, (including one who is engaged in the very labo-

rious and heating employment of the manufacture of gas,) all of whom unanimously agree in the statement, that they are in better health, and are able to do their work much better, without the use of intoxicating drink than with it.

"That very important class, the fishermen of our town, are probably exposed to the greatest hardships, and the greatest inelimity of weather, of any that we could refer to. Many of these have united themselves with us, and, notwithstanding the severe nature of their employment, and the privations they have to endure, to which landsmen are strangers, they state that there is no difficulty in performing the hardest labour without the aid of the intoxicating glass; that though it may stimulate them for a time, it soon loses its effect, and makes them less able to endure exposure than before they took it." This testimony is remarkably confirmed by a very interesting communication recently received from St. Ives, in Cornwall, in which it is stated, that of the many hundred fishermen who belong to that port, upwards of three-fourths are pledged teetotalers; and their testimony is, that, placed under any privation, or placed in the most trying circumstances, they can get through their labour much better without intoxicating drinks than with them. The letter further states, that the fishermen of St. Ives have had the most severe trials on the cold water principle. "There have been times, when they have been in the fishing-boats for sixteen hours, without fire, or anything warm, and yet have sustained no inconvenience. During the pilchard fishery, in the winter months, (an employ which was thought impossible to be performed without the use of drinks,) men have been carrying the fish in baskets, from the shore, through the water, for six, eight, and even ten hours a day, without one drop of the drunkard's drink; and, in some instances, on nothing but cold water and bread."

In the "Report" annexed to the communication referred to, it is stated, that "out of eighty-eight vessels belonging to that port, seventy-four sail without the use of the poisonous draught, their crews being nearly all teetotalers, and forty-four of the masters are pledged members;" and that "during the last pilchard fishery, so great was the reformation effected, that, out of two thousand persons then employed, there was scarcely a drunkard to be seen."

The following testimony, from residents at Douglas, Isle of Man, corroborates the above document:—

"We, whose names are hereunto subscribed, hereby certify, that we have been in the habit of using intoxicating liquors for many years, while employed in the cod and herring fisheries upon the coasts of this Island; that we have also adopted and acted upon the principle of total abstinence from all intoxicating liquors for many months; and we give it as our unanimous opinion, from personal experience,

that we have felt no inconvenience or loss of health by abandoning the drunkard's drink; but, on the contrary, have been better able to attend to our duties, while we can endure more fatigue and toil, both by night and by day, and in every respect we feel more happy in mind, healthy in body, and comfortable in circumstances, than when we spent our time and money at the public house. This declaration we make before the world, conscious of the advantages resulting from the adoption of total abstinence from all that can intoxicate.

“Signed in Douglas, in the Isle of Man, on the 12th day of September, one thousand eight hundred and thirty-seven,—

Name.	Age.	Used Liquors.	Teetotal.
Thomas Shimmmin, Peel,	53 years	20 years	Nine months.
James Cain, Peel,	35 ..	20 ..	Six months.
William Corkill, Peel,	42 ..	25 ..	Three years.
Thomas Craine, Michael,	50 ..	30 ..	Six months.
William Craine, Ramsey,	31 ..	15 ..	Eleven months.
William Quayle, do.	57 ..	40 ..	Two years.
William Goldsmith, do.	30 ..	20 ..	Fifteen months.
Thomas Cain, Patrick,	40 ..	21 ..	Five years.
Robert Kelly, Douglas,	41 ..	23 ..	Fifteen months.
John Cannell, Colby,	47 ..	22 ..	One year & half.
James Renny, Chester,	47 ..	27 ..	Two years.
Robert Tear, Ramsey,	31 ..	18 ..	One year & half.”

These interesting testimonials might be multiplied to an almost unlimited extent. Those adduced, however, illustrate the benefits of a principle embraced with the happiest results by tens of thousands of our hard-working men in various parts of the United Kingdom.

SECTION IV.

THE NATURE AND OPERATIONS OF TEMPERANCE SOCIETIES.

I own myself a friend to the laying down of (strict) rules, and rigidly abiding by them. Indefinite resolutions of abstemiousness are apt to yield to extraordinary occasions; and extraordinary occasions to occur perpetually. Whereas, the stricter the rule is, the more tenacious we grow of it; and many a man will abstain rather than break his rule, who would not easily be brought to exercise the same mortification from higher motives. Not to mention, that, when our rule is once known, we are provided with an answer to every importunity.

PALEY'S MORAL PHILOSOPHY.

I have long been a convert, from a conviction, founded on experience and observation, that they (the total abstinence societies) are most instrumental in raising thousands and tens of thousands from a degraded profligacy to virtuous and industrious habits, and converting sinners from the ways of vice to those of religion. I need scarcely add, that I think every clergyman who has the welfare of his parishoners at heart, and is really zealous in the cause of his profession, ought to give them his support.—THE BISHOP OF NORWICH.

I. The constitution and principles of temperance societies.—II. The inefficiency of temperance societies based on the moderate use of inebriating liquors.—III. Details of the operations of temperance societies. 1. General statistical facts on the progress of the cause. 2. The influence of temperance operations on education, morals, re-

ligion, good conduct, and the general welfare of the people. 3. The effects of temperance principles in the diminution of disorder and crime. 4. The influence of temperance operations on trade, wages, and the savings of the poor. 5. The effects of temperance principles in the diminution of disease and mortality.

I. *The constitution and principles of temperance societies.*—In consequence of the dreadful prevalence of intemperance, temperance societies were established in Germany, in the sixteenth century. The nobility and upper classes, in particular, were addicted to the vice of intemperance. The first association of this kind, of which we have any account, was instituted by Sigismond de Dietrichstein, under the auspices of St. Christopher, A.D. 1517.—Maurice Landgrave of Hesse formed, A.D. 1600, a similar association, under the name of “The Order of Temperance.” Several of the reigning princes, and many of the principal nobles of Germany, ranked among its supporters. The first law of this association was as follows: “Be it ordained, that every member of this society pledges himself, from its institution, which dates December 25th, 1600, never to become intoxicated.” The other rules of this association, however, strangely contrast with its professed object as specified in its first regulation. Each member was limited to fourteen glasses of wine daily. A knight, for example, was allowed at each meal (twice a day) seven *bocaux*, or glasses of wine, which were to be drunk in not less than three draughts. The size of the cups is not specified. Beer, mineral water, toast-and-water, and other beverages, were permitted at meals. Spanish wines, however, and brandy, Geneva, and strong malt liquors, such as London porter, which was in repute abroad even at that early period, and Hamburgh double ales, were interdicted. The members were bound, by their

pledge, for the space of two years. A third institution of this kind was established and patronized by Count Palatine, Frederick the Fifth. It was denominated "The Golden Ring." These associations were not only limited in their usefulness, but transitory in their existence. In the year 1691, the Duke Ernest Augustus, of Brunswick, Lunenburg, issued an edict to regulate and diminish the sale of brandy, in which it was stated that "brandy was then no longer used by the common people as a means of assisting digestion, for which alone it was originally recommended, but as a daily beverage, and a means of getting drunk." The first edict, however, respecting brandy-drinking, is dated A.D. 1360.

The appalling extent of intemperance, in the early part of the nineteenth century, throughout a large portion of the globe, and particularly in England and in America, first led to the establishment of modern temperance societies. Hitherto, all attempts at reform had been looked upon as impracticable. In America, this melancholy state of morals was regarded by wise and reflecting persons with equal alarm and despair. The social habits of life, the solemn ceremonies of death, even the sacred offices of religion, were almost universally contaminated with this all-pervading and demoralising vice.

The American Temperance Society was instituted in 1826. It owes its origin to the writings and labours of the Rev. Dr. Lyman Beech, and others, whose zeal in the cause of morals and humanity will render them conspicuous in the annals of philanthropy and patriotism. This institution, through the blessing of God, has materially contributed, by its salutary operations, to save that country from impending ruin.

In the year 1829, temperance societies were established in our own country. These were eventually concentrated under one general denomination. The American and British societies were constituted on the same principle—a mutual agreement to abstain altogether from the use of distilled liquors, and to discountenance the causes and practices of intemperance. In England, however, and to a limited extent, also, in America, the consumption of ardent spirits did not constitute the most powerful source of intemperance. Hence, the ultimate formation of temperance societies, based on the principle of total abstinence from all intoxicating liquors.* This was seen to be

the only practicable and efficacious means of eradicating the evil of intemperance. The operations of these societies, in America, have been eminently attended with success. In Great Britain, and also in particular in Ireland, these operations have had a salutary and beneficial effect.

"The highly-instructed and intelligent men through a series of generations shall have directly within their view an enormous nuisance and iniquity, and yet shall very rarely think of it, and never be made restless by its annoyance; and so its odiousness shall never be decidedly apprehended till some individual or two, as by the acquisition of a new moral sense, receive a sudden intuition of its nature, a disclosure of its most interior essence and malignity—the essence and malignity of that very thing which has been offering its quality to view, without the least reserve, and in the most flagrant signs, to millions of observers."*

The institution of temperance societies demands our serious consideration, not only as a means of self-preservation, but also from its paramount importance as a measure calculated to ensure the safety of our families, and the welfare and happiness of future generations. Sensual temptations, in connexion with the pernicious and enslaving usages of intemperance, so prevalent in this country, reduce thousands to eternal ruin. The poet remarks—

He who can guard 'gainst the low baits of sense,
Will find temptation's arrows hurtless strike
Against the brazen shield of Temperance,
For 'tis the inferior appetites enthral
The man, and quench th' immortal light within
him.

The senses take the soul an easy prey,
And sink the imprison'd spirit into brute.

The mode by which temperance societies produce their salutary operations is simple and efficient.

1. The principal object which temperance societies have in view, is, to diffuse information on the subject of intoxicating liquors, and to disabuse the public mind concerning the false estimate they have formed in regard to the beneficial properties which they are supposed to possess, as well as to collect information relative to the evils of intemperance, and to present it to the world as an inducement to the adoption of remedial measures.

2. The constitution of these societies is simple. It consists merely of a social union of such persons as are disposed to promote the fundamental principles of the association. This measure, in fact, includes not only a profession of approval, but it also involves an obligation of co-operation.

* Speculations not unfrequently appear in the public prints in reference to a phrase, by which these societies are known in various parts of the kingdom—Teetotal. It is a provincial expression, and of Lancashire origin. It means "entire," through abstinence, in contradistinction to the half-and-half, or, as it is termed in the popular language, "moderation scheme."—If an individual—slave to some sin—intemperance, for example—resolves to abandon it altogether, he not uncommonly makes use of double words to clench the matter, or to give in-

creased force to his resolutions, "I will give it up teetotally." It is in fact a repetition of the same sentiment—a resolve upon resolve—a final, and, in intention at least, unalterable decision. Hence the phrase "Teetotal," as applied to temperance societies.

* Foster on the Evils of Popular Ignorance.

3. To effect this result, a document, in the form of an acknowledgment or engagement is drawn up, called a "Pledge," which all persons who desire to unite with the society are called upon to subscribe. This act is understood to constitute an open profession of approval of, and determination to adhere to, the principles upon which the institution is founded.

The amiable and respected Judge Cramp-ton thus ably combats the objection which some individuals urge against *pledging* themselves to a course of action :—

First.—To pursue a virtuous or innocent course of action cannot be wrong : such is also our duty.

Secondly.—To resolve on following a virtuous or innocent course of action cannot be wrong : such is also our duty.

Thirdly.—To declare to others our resolution to follow a virtuous or innocent course of action cannot be wrong : such a declaration may in some instances be inexpedient; in others it may be useful; but whether expedient or not, it cannot be wrong. Reason and experience testify the vast power of example and of influence, in leading human beings either to vice or to virtue, to happiness or to misery; and religion commands us to "let our light so shine before men, that they may see our good works." The publication, therefore, of good resolutions cannot be wrong.

Fourthly.—To make public, *by writing*, our resolution to pursue a virtuous or innocent course of action, as it changes neither the nature of the thing, nor the responsibility of the agent, can be no more wrong than to make or publish such resolution in any other way. Subscription in writing, which is a written declaration of intention, is only a more clear, deliberate, and unequivocal avowal of that which our consciences have already admitted to be a duty.

Fifthly.—It is every man's duty to love his neighbours, and to do them all the good which he can by honest means effect. He, therefore, who resolves to pursue a course of action laudable or innocent in itself, is bound to publish such his resolution, if that publication be calculated to advance the interests of his fellow-creatures; and if the good end can be best effected by a written publication or subscription, then such a written publication or subscription is plainly a matter of duty.

The fundamental principles of temperance societies are included in the great laws of *Christian charity* and *self-preservation*. They are, indeed, the offspring and a noble exemplification of that first principle of Christianity so beautifully described and admirably illustrated by St. Paul, under the name of *αγαπη*, 1 Cor. xiii., the true meaning of which word is "benevolence" or "love." In reference to this celebrated and primary Christian virtue, the

Apostle Paul declares, that it is our duty, both by precept and example, to "consider one another, to provoke unto love and to good works," and which St. James describes as "pure and peaceable, full of mercy and good fruits."

It is a mistaken notion that the principles of these societies embrace in their object the intemperate part only of the community. The reformation of the drunkard is an important consideration in the grand scheme of Christian benevolence. On the principle, however, that "prevention is better than cure," the principal means of its accomplishment necessarily depend on the influence and exertions of the sober part of the community.

To describe the benefit which would result from a general disuse of intoxicating liquors would be to exhibit the reverse side of the melancholy picture delineated in this volume. If this moral and physical scourge were banished from our beloved country, religion, morals, individual happiness, and national prosperity, would be promoted and augmented to an incalculable extent.

Objections are not unfrequently urged against the institution of temperance societies, on the ground that there is no scriptural command for abstinence of this kind; and that to propound this remedy for intemperance is to propose a scheme which, in fact, supersedes and derogates from the character of the Gospel, and endeavours to impose upon mankind restraints which God does not either require at our hands or authorise in his holy Word.

The Christian reader will readily perceive the fallacy of these popular objections. The Gospel is acknowledged by all to be the only means of salvation; the Word of God, however, nowhere prohibits the employment of subordinate means to remove those unnatural obstacles to its reception which so universally prevail in the present day. In no part of the Scriptures is there found a command for the habitual and dietetic use of intoxicating liquors. In many parts of the sacred Book are found decisive proofs of divine approbation of those who abstain from their use. The Scriptures contain no specific commands in relation to many evils which the pure principles of divine inspiration can by no means tolerate. Among these may be included theatrical entertainments, gambling, and other sinful amusements, some of which obstructed the diffusion of Christianity in the time of St. Paul. Ferocious exhibitions of gladiatorial skill took place in the city of Rome, at the time St. Paul wrote his Epistle to the Romans, and yet no literal condemnation of this practice is to be found in the writings of that Apostle.

Many eminently useful institutions are in operation in the present day, as auxiliaries to the Gospel, for which there is no

direct command in the Bible ; who, however, in this age of sacred light, would on this account condemn or prohibit the formation of bible and missionary societies, Sabbath-schools, and other similar establishments ? These subordinate institutions, indeed, are distinguished manifestations of the essence of Christianity, which teaches us not only to “deny ungodliness and worldly lusts, and to live soberly, righteously, and godly” ourselves, but also to do our utmost to promote the temporal happiness and eternal welfare of our fellow-creatures.

The Gospel is adequate to remove the vice of intemperance ; its principles, however, have not hitherto been brought to bear upon the evil. The remonstrances and denunciations of Christian teachers have almost invariably been directed against the drunkard, while the source or sources of the evil have been either partially or altogether overlooked and neglected. Let Christian temperance be advocated from our pulpits, and in our various religious institutions, and, doubtless, ere long, the vice of intemperance, with all its attendant evils, will be removed from our land.

II. *The inefficiency of temperance societies based on the moderate use of inebriating liquors.*—Temperance societies established on the principle of abstinence from ardent spirits alone, it is evident, were insufficient to remove the evils of intemperance. In some districts, in particular, fermented liquors were the only inebriating beverages in common use. Wines, moreover, as shown in a previous section, contain large portions of brandy ; so that indulgence in fermented liquors, among the opulent at least, is but another mode of drinking ardent spirits. It is an important fact, also, that more alcohol is consumed, in this country, in the form of fermented drinks, than in ardent spirits. These facts show, that all attempts at reform, to prove effectual, must include, as their fundamental principle, abstinence from inebriating liquors of whatever description.

The following important documents, from gentlemen, formerly eminent members of the old or moderation society, exhibit the inefficiency of temperance operations on the principle of abstinence from ardent spirits alone. These statements were made in 1839. Total abstinence societies, since that period, have considerably enlarged their operations.

The Rev. David Charles, of Bangor : “I laboured perseveringly for the space of two years or more with what is called the temperance society, and succeeded in persuading some few drunkards to sign that pledge ; but of those few I know not of one who was reclaimed thereby ; one half-pint of beer led to another, and the second to a third, and so on ; so that all the labour

was in vain, except as it was a preparatory work for a more efficient means. Seeing that the old pledge was useless, I was compelled, from conviction, to give it up and adopt the new. It is now about two years since we recommenced our operations, and such has been the result, that not only myself, but thousands of dying drunkards, have cause to bless God for inducing us to sign the total abstinence pledge.”

Dr. Ferrier, of Edinburgh : “Mr. Wright, formerly a barrister, and now a pastor of an independent congregation, and a gentleman of great worth and influence, states that, within the last fifteen months, more have signed the new society’s declaration than have signed the old since its commencement, eight or nine years ago. About one half of his congregation are reclaimed drunkards.” — “Mr. M’Lean informs me that the old society has never received more than 7,000 or 8,000 signatures, whereas the new has had 15,000. That there are not fewer than a thousand reclaimed drunkards in the new society, while the old could scarcely number one. Indeed, the advocates of the old society seldom attempted to reclaim a drunkard.” “Mr. Kinniburgh stated the other day, that the new society had done more good in his district, during the seven months that it had been in existence, than the old society had done in the seven years and a half that it had existed there. The tailors, printers, shoemakers, &c., branches of the old society, have come over in a body to the new.—At Prestonholm, a small village near Edinburgh, the whole population, with very few exceptions, has joined the new society. Formerly, on the week after receiving their pay, not above a third of the usual quantity of work was done, but since they have adopted the principles of the new society, there is no difference in this respect ; and in other respects the improvement is astonishing.”

Mr. John Andrews, Jun., of Leeds :—“It is,” he says, “eight years since the Leeds society was established on the plan of abstinence from ardent spirits. For upwards of five years the society continued to labour on this plan. Meetings were regularly held, tracts were distributed, much money was expended, but no impression appeared to be produced upon the habits of the community. The traffic flourished—not one drunkard was reclaimed, &c.—Since the adoption and advocacy of the teetotal principles, the number of reformed characters has gradually increased, so that we have now in the town and neighbouring villages at least three hundred, many of whom have been honourable, consistent, and useful members of Christian churches. I have visited different parts of Yorkshire and Lancashire, besides other parts of the country, and, in every place where a society on the new system is in operation,

many such cases may be found as trophies of success.—We had many instances of members who have signed the moderation pledge becoming drunkards. The society tolerated and sanctioned the use of fermented drinks, and by these they were betrayed into habits of intoxication.”

G. B. Browne, Esq., of Halifax: “In 1832 we formed a temperance society on the moderation pledge: the effects were scarcely visible; no drunkards were reclaimed, and not many reduced their daily consumptions of wine and porter.—In 1835 the total abstinence pledge was introduced.—The first society dwindled away, and the teetotalers gained strength, and now reckon 700 members, among whom about one hundred are reclaimed characters, several of whom are become truly religious.”

Mr. John Cadbury, Birmingham: “The moderation system was zealously and ardently advocated for many years in this town, and enrolled those of high rank and wealth among its numbers. We laboured and laboured to induce the working-classes to come amongst us, and so they did to a limited extent; but with all our industry, in distributing tracts, visiting poor drunkards, and holding meetings, the interest sank away, until the existence of a temperance society was only in name. The introduction of total abstinence principles acted like an electric shock on the working-classes, who at once saw truth, safety, and certainty of the remedy; and very soon the moderation society sunk into oblivion, whilst the teetotal system became rooted and grounded in the minds of hundreds of faithful converts, amongst whom were very many men of drunken, dissolute habits. On the moderation system I never knew one drunkard reclaimed; whilst, on the teetotal plan, we have hundreds who were once drunkards, now, not only sober men, good husbands, and kind fathers, but regular frequenters of a place of worship. To be short: total abstinence is the only cure; and that it is safe, experience has amply and abundantly proved. I do not know of a single instance of any individual having suffered from relinquishing the use of these things—no, not even the worst drunkard, from giving them up at once.”

J. Cropper, Jun., Esq., of Liverpool: “We found in Liverpool, after working the old society for some time, that little good resulted. We could point to few instances of permanent good. It was no difficult thing for men to agree to abstain from spirits; they could still go to the tavern and enjoy their company and their all; and those who were reformed then, were so by practising the new plan—entire abstinence.—Now, we have thousands in Liverpool who observe entire abstinence, and the results are, in many instances, delightful. We have many hundreds who from living in wretchedness, (though earning good wages,) and

in the most glaring sin, and in forgetfulness of, and even blasphemy against, God, are now, I hope, convinced of sin, and clothed, and in their right mind, and sitting at the feet of Jesus. The results of our labours are felt in all directions—in clothing the poor, in bringing comfort to many a wretched wife, and food to many a starving child. The publicans also, and the brewers, feel our encroachments on their profits. I am told that we have reduced the consumption of ale and porter nearly one half. Our consumption was 200,000 barrels per annum; so that, in this alone, we save the poor labouring families £100,000 a year at least.”

T. Beaumont, Esq., Surgeon, of Bradford: “Here the first moderation society was formed, and here there was no want of zeal, talent, or piety, in the working of that system; and yet, in nearly five years, we did not succeed in reforming one solitary drunkard. When the plan of total abstinence was first promulgated, it was repudiated and rejected by most of our temperance friends; so that when it came to be tolerated, even much less cordially accepted, many of our old supporters left us. But since this system has been in operation, we have recorded more than two hundred cases of men who have, by the blessing of God, become delightful monuments of the infinite superiority of the one system over the other. With very few exceptions, these persons have joined themselves to some church, and become reputable members of the society.—It has now been ascertained, by an overwhelming mass of evidence, that in all cases, and under all circumstances, in all countries, and in all conditions of life, the entire disuse of all alcoholic beverages is attended with the most decided benefit.”

III. *Details of the operations of temperance societies.*—In America, the success of temperance operations has been most manifest. “Within nine years,” says Dr. Humphry, President of Amherst College, U.S., “there were formed, within the different states, *seven thousand temperance societies*; one embracing a majority of members of both Houses of Congress, and the whole including nearly a million and half of members. Upwards of three thousand distilleries were stopped, and given up; and more than five thousand merchants and dealers in spirits relinquished the trade, which was deemed immoral, and hurtful to the best interests of the community. No spirits were allowed to be used in the American navy or army; and about twelve hundred merchant-ships were navigated without the use of intoxicating drinks; five thousand actual drunkards were known to have been reclaimed, and made sober men; and, in the county of Plymouth, there was not a single seller of ardent spirits left.”

The total abstinence principle, which has not long been introduced into the United

States, has, within the last year or two, effected most gratifying changes. The annual report of the American Temperance Union, for 1842, contains some strong proofs of success. The number of pledges taken in the United States during the past year, chiefly from among hard drinkers, tipplers, and drunkards, was estimated at over half a million; 30,000 of these were in Kentucky, 60,000 in Ohio, in all the West, 200,000, of whom every seventh man was reported as a reformed drunkard, and every fourth man a reformed tippler. In Boston 20,000 had signed the pledge, of whom 13,000 were total abstainers. In central and western New York 50,000. In New York city 16,000. In Philadelphia, and the region round about, 20,000. In Pittsburgh, 10,000. From the returns which had been made, the number of reformed drunkards was estimated at over 50,000. "The report," says the Journal of the American Temperance Union, for June, 1842, "presents a variety of testimony from various quarters, showing that the reformed men have generally kept their pledge inviolate; that there has been an extraordinary restoration of health and physical power, of self-respect and moral tone, mental acumen, and natural affection; and that the work of reform has removed domestic misery, and want, and degradation, and been the direct cause of happiness to thousands of families beyond, perhaps, any similar occurrence in the history of man." In Lancaster, five years before, there were seventy distilleries, most of which, if not all, had two stills run-

ning day and night, and six large breweries in successful operation. Now, but one or two distilleries are at work, with but limited employment. In Pennsylvania 1,500 stills were in operation in 1815; now only 15 remain. The town of South Kingston, state of Rhode Island, with a population of 3,718, has no licensed place of any kind where intoxicating liquors are sold. In the state of New York, in 1825, there were 1,149 distilleries at work; in 1835, they were reduced to 337. In 1840 this state had only 206 distilleries, which manufactured annually 2,710,110 gallons of poison. At Boston the mayor and aldermen have resolved to license no persons to sell spirituous liquors the ensuing year. The same spirit is spreading among the municipal officers in various parts. E. C. Delavan, Esq., the distinguished philanthropist, speaks in yet stronger terms, in a letter written towards the close of 1842: "The whole land," he remarks, "from one extremity to another, is aroused; high and low, rich and poor, join hand and hand in this great and glorious enterprise. The reformation of drunkards is one of the most astonishing incidents on record. *At least 100,000 have been reformed within the past two years*; and the work is rapidly going on; and it is now my belief, in ten years we shall not have a thousand drunkards in the United States. The children are all growing up right: nothing is more common than to find the children of the rich and influential uniting in the pledge, while their parents give no sign."

The following statement of the quantity of rum, brandy, gin, and wine, imported into Boston, will illustrate the change generally taking place in the drinking habits of the people of the United States:—

Year.	Rum.	Brandy.	Gin.	Wine.	Total.
1839 ..	78,467 ..	104,370 ..	244,786 ..	501,768 ..	929,391
1840 ..	149,243 ..	88,960 ..	181,361 ..	369,856 ..	789,420
1841 ..	68,961 ..	114,759 ..	149,553 ..	570,259 ..	903,532
1842 ..	32,757 ..	74,653 ..	110,885 ..	184,375 ..	402,670

The quantity of rum, brandy, gin, and wine imported in 1842, compared with

1839	shows a decrease of	526,721	gallons, or about	56½	per cent.
1840	ditto	386,750	ditto	49	ditto.
1841	ditto	500,862	ditto	55½	ditto.

The quantity of domestic spirits exported to foreign ports

In 1839	was	227,755 gallons	In 1841	was	785,045 gallons
In 1840	..	408,589 ditto.	In 1842	..	430,965 ditto.

The Boston Evening Gazette, for December 31st, 1842, remarks, on these statements, that besides this remarkable diminution, a much larger proportion of what is imported or distilled here is used in medicine, and for manufacturing and scientific purposes, than at any former period.

In Great Britain the change, although

remarkable, has not been attended with equal success. The consumption of these drinks, which are used by the rich, has been reduced to an encouraging extent. Spirit drinking, however, has unfortunately not been reduced. The following tables will exhibit a considerable diminution in the consumption of malt liquors:—

BEER SHOPS.

The number of licenses granted

In 1839	was	44,729
In 1841	ditto	38,797

Decrease in two years	5,932
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MANUFACTURE OF MALT.

Quarters of malt made

In 1840	were	5,307,147
In 1841	ditto	4,520,501
		<hr/> 786,566 <hr/>

or 6,292,528 bushels, forming more than one-seventh part of the entire quantity made in 1840. The depressed state of trade, and the consequent existence of poverty among the labouring classes will, of course, have had considerable effect on this change. Much of it, however, has been produced by the rapid diffusion of total abstinence principles.

Messrs. Shaw and Maxwell, wine merchants in London, in their annual circular, state that the consumption of wine during the last year (1842) has fallen off upwards of 300,000 gallons. Port wine, which fifty years constituted 70 per cent. of all wines consumed, has fallen to 32 per cent. This statement was made in August of the same year.

In Scotland the temperance reformation has effected an important change in the drinking habits of the people. The decrease of public houses in Aberdeen, for example, has been most remarkable.

In 1837	there were	870	public-houses
1838	ditto	627	ditto
1839	ditto	588	ditto
1840	ditto	575	ditto
1841	ditto	480	ditto
1842	ditto	399	ditto

being a decrease of 471 houses for the sale of strong drink in Aberdeen since the formation of the total abstinence society in that city.

In Ireland, the temperance operations, under the auspices of Father Mathew, have been conducted on a large scale. No praise of the writer can add to the honourable distinction to which that great and good man has attained. The result of his labours are yet unknown; and this distinguished apostle of temperance will be handed down to posterity as the great benefactor of his country. The blessing of God has manifestly attended his exertions.

A return recently made to the House of Commons of the spirits taken out for home consumption in Ireland, from the 5th of January to the 5th of April, 1842, and the corresponding periods of 1840 and 1841, exhibit an enormous decrease in the use of ardent spirits. In the quarter ending April

5th, 1840, the number of gallons taken out for home consumption was 2,212,465; in the corresponding quarter, however, of 1842, it was only 1,682,548, being a reduction of 529,917 gallons in three months. This wonderful reformation still advances with rapid strides.

2. *The influence of the temperance operations on education, morals, religion, good conduct, and the general welfare of the people.*—A gentleman interested in the progress of temperance, and who kept open an evening school for the benefit of persons in his employ, having to determine, in the winter of 1840, whether he should continue it open in the summer, requested them to fill up a form containing certain particulars respecting their progress in reading, writing, and arithmetic, and to state whether they were desirous of attending the school during the period in question. The conclusions at which he arrived from the returns made, an analysis of which he gives in full, were as follows:—

“1. That total abstinence from all intoxicating drinks increases the desire of learning in the proportion of more than three to one.

“2. That of those who cannot write their names, more than three to one of the drinkers prefer ignorance, whereas all the teetotalers are desirous of learning.

“3. That, with drinkers, the desire of learning decreases as they grow older, but that with teetotales it increases.”

The returns of those persons who had already acquired the degree of education which the school was intended to communicate were left out of the calculation. It is also proper to remark, that even those persons amongst them who were not teetotalers were, generally speaking, sober and moderate men.

Mr. Dunlop relates an interesting circumstance in connection with education and temperance, in reference to the locality in which the temperance movement first began in North Britain, in 1829. The town in question contained at that period under 35,000 inhabitants. The temperance artisans instituted a mechanics' library, (now divided into two sections,) which has, chiefly through their own exertions, gradually progressed until it now amounts to thirty-five hundred volumes.

“At Messrs. Lepper's mill, in the neighbourhood of Belfast,” remarks the Dublin Temperance Herald, “a school is now held, the teachers of which are reclaimed drunkards; and one of the operatives there stated that he could put his hand on a hundred children now receiving instruction there, who, a short time since, were either idle or mischievously employed, and destitute of instruction.”

“In the course of one year,” remarks Mr. Eaton in his address to the Society of Friends, 1839, “the increase in the number

of the Sabbath-school children in the extensive and populous parish of Halifax, was computed to be at least three thousand, a circumstance that was mostly attributed to the operations of the total abstinence society."

"At Camborne, in Cornwall," remarks the same benevolent individual, "during the course of a few months, eighty children were admitted into the Wesleyan Methodist Sabbath-school, all of whom, it was ascertained, had been previously prevented from attending in consequence of the drinking habits of their parents. In most of the cases," continues Mr. Eaton, "the parents had not been what is generally termed intemperate drinkers, but, as is usually the case with the labouring poor, their limited means of support had been grievously misapplied under the delusive notion that a considerable quantity of strong drink was necessary to enable them to perform their daily toil."

Instances of this kind have of late years been frequent in their occurrence. Sunday schools, mechanics' institutions, and other places of instruction, have received considerable accession of their numbers in those towns where temperance principles have made much progress.

The morals, religion, good conduct, and, of course, general welfare of the people, have increased in proportion to the success of the temperance cause. It would be impossible, however, to enter into this subject at length. The powerful facts now on record, illustrative of these points, cannot fail to excite no less astonishment than gratitude, that God has so signally blessed the operations of the society. A few facts only are selected by way of illustration.

At a late annual festival of the Penzance total-abstinence circuit, the Rev. H. E. Graham, rector of Ludgvan, preached to the society; and, in reference to the occasion, he has observed that "it was impossible for any person to witness the thousands going to the house of God that morning, without their minds being impressed with the sight. That day they had seen many in the house of God who were once bad fathers and bad husbands, and of whose moral improvement we could not have cherished the slightest hope, but who are now reclaimed, who have had the courage to give up what twelve months ago they believed to be necessary, although it was destroying their bodies and souls, and are now able to stand forward and testify to their improvement in health and mind, and domestic circumstances. It was pleasing to see the influence of the society have a religious tendency, to see so many thousands go up to the house of God, to acknowledge the Lord in his work."

The Rev. P. Penson, Vicar of St. Oswald's, in the city of Durham, after alluding to the great improvement which had taken place

in the outward condition of many in that city and the neighbourhood, through teetotalism, remarks: "These outward symptoms of improvement have been attended with, or more properly speaking, occasioned by, corresponding personal and mental advancement. The revival of spiritual advantages has become an object of solicitude. Sunday schools and places of worship are called for and are being erected in many places where there were none before, and additions made to those previously existing. As the depository of the Durham Auxiliary Bible Society, I have issued more Bibles and Testaments, during the last three or four months, than in several years previously. That this improvement is owing to the temperance reformation there can be no doubt, as the state of affairs, in other respects, remains precisely as it was before."

The statements of clergymen, in various parts of the kingdom, might be extended at considerable length. The testimonies of ministers of different denominations are equally conclusive.

The Rev. David Charles, of Bala, in Wales, remarks, in reference to North Wales: "In some districts the cause has been, I might almost say, *universally* embraced, and the blessings consequently have been proportionably greater. In others, it has met with much opposition, and the benefits have been proportionably less. Our district contains five parishes, the population of which may be rated at about 6,000. Out of these, the number of pledged abstainers is about 5,000. The number of those united to Christian churches, and are full members, is about 2,600; and out of this as many as 600 have joined the churches during the last year, and are now consistent members thereof. The great success of the Gospel amongst us is mainly attributed to the Lord's blessing upon the operations of the total abstinence societies, which have been, in a remarkable degree, the means of preparing the minds of the people for the reception of the Gospel, and of leading them to seek for more than the immediate benefits of total abstinence, even the salvation of their undying souls. In Merionethshire alone, the churches of Christ have had cause to rejoice, in that about 2,000 during the last year have cast in their lot with them, and made a public profession of the Lord Jesus Christ; and it has been frequently remarked, that in those places where the total abstinence cause has been zealously embraced and proposed, there has the Spirit been more remarkably poured from on high, and the revivals more powerful. This is a fact which cannot be denied. The glorious work still goes on—the Lord is amongst us of a truth—whole neighbourhoods 'ask their way towards Zion with their faces thitherwards.'"

"There are hundreds," says the last

report of the Wigan Total Abstinence Society, "who formerly were a pest to this town, who are now clothed, and in their right minds, and with their little ones resorting to the house of God."

"The number of members enrolled in two years," says a writer in Cornwall, in 1840, "is upwards of 40,000. There are added to the Christian churches 5,000; of reclaimed drunkards not less than 2,000."

The annual report of the Birmingham Total Abstinence Society, for 1838, states as follows: "During the past year, a very careful scrutiny has been made, as to the moral and religious condition of those who have become members of the society, the result of which is truly gratifying, and encouraging. There are, at the present time, registered in the society's books, 177 individuals, once known as dissolute drunkards, Sabbath-breakers, terrors to their families, now not only consistent members of teetotalism, but 170 of whom are regular frequenters of places of worship."

The secretary of a society in the north of England writes: "Great numbers attend the house of God, and are greatly reformed in their walk and conversation, but have not yet entered into church-fellowship. We have hundreds of sailors also, belonging to the port, who are consistent members; and out of the number of pilots (seventeen), six are teetotalers."

The secretary of a society in Devon remarks: "We have a great many who, before the adoption of our principles, were totally careless and indifferent on the all-important subject of religion; but are now deeply interested in their immortal welfare, and constant attendants on the means of grace."

Another secretary observes: "We have twenty of the reclaimed in Christian communion, of whom eighteen are such as have gone into the very depths of intemperance, and two-thirds of them were backsliders from religion. They are now the most respectable ornaments of our society, are diligent in business, fervent in spirit serving the Lord."

A fourth secretary writes: "It would take a volume to describe all the good that has been done here in reclaiming intemperate characters. There are, however, those who have been joined to religious societies four times each, and have become pests to the town, through drink. but who, since they have joined the teetotal society, have adorned the doctrine of God their Saviour."

A fifth secretary says: "All our reclaimed drunkards (40) make some profession of Christianity. I believe we have neither infidel, deist, nor socialist in our society."

A sixth secretary says: "All our reformed drunkards attend places of worship regularly, or stay at home some part of

the day, that their wives or families may attend."

A seventh secretary states: "Nearly all our reclaimed drunkards attend places of worship."

An eighth secretary says: "Out of 105 reclaimed in this district, we have eighty-four in Christian communion; and we have reason to believe, that had it not been for the indifference and example of Christian ministers, every one who has been reclaimed would have been united in Christian communion."

A ninth secretary remarks: "Many who were formerly strangers to the house of God are now regular in their attendance on the means of grace."

A tenth secretary says: "Those who have been reclaimed by the instrumentality of the society, and have joined Christian churches, are walking consistently, and evidence by their outward conduct that they are changed by divine grace."

An eleventh secretary observes: "The cases of the reclaimed, who have become professing Christians, are so numerous, that very many sheets of paper would be required to give an account of them."

A twelfth secretary says: "The abstinence principle with us has had a very beneficial effect, in a religious point of view. Many, who have been brought back to the paths of moral rectitude, have likewise come under the influence of the Holy Spirit, and have become professing Christians, and heirs of eternal happiness in the kingdom of God."

It would be easy to extend these testimonies to an almost unlimited amount. Thousands of similar documents are now on record, exhibiting the wonderful influence which temperance principles have on religious welfare.

Mr. Dunlop, not long ago, took considerable pains to investigate the influence of the temperance reformation on religion. He divided the reformed drunkards connected with the societies into three classes. 1. Those who make no profession of religion at all, and whose reformation was merely external as regards their habits. 2. Another class, who admitted the agency of God in their amendment, acknowledged that they could not remain temperate without his grace, and had become, it may be, somewhat regular attendants on public worship, or even members of Christian congregations. 3. A class who had undergone a much greater and decided change, who had abhorred their former ways, who acknowledged the mercy of God in Christ to the chief of sinners, who had become men of prayer in secret and in their families, had joined Christian congregations, and whose lives had not only been strictly consistent with these professions, but who had lived in this manner such a length of time as might justify all cautious and experienced

Christians in conceiving that they might be classed among the objects of a sound and genuine conversion to the Saviour.

Mr. Dunlop confined his inquiries to the third class. He had not only extensive general opportunities of obtaining information on this subject, but enjoyed three special occasions of information in the summer of 1838; viz., at the meetings of temperance delegates, from various parts, in London, Liverpool, and Glasgow. He explained, in the most distinct manner he could, that his investigation was restricted to the third class above mentioned, and found that the average amount of cases of that description might be fairly taken at seven in the hundred of all who had become pledged members of teetotal societies, who had been led, in furtherance of their good resolutions, under the sound of the Gospel, and that under circumstances of seriousness and sobriety favourable to its reception. Mr. Dunlop, therefore, calculated, that if the members of total abstinence societies in 1838 amounted to one million, an estimate not overrated, the pleasing cases in the third class would amount to somewhat more than seventy thousand. The above estimate did not include Ireland, nor, indeed, many places in Great Britain where revivals of religion, on a large scale, had resulted from the operations of temperance.

In those parts of the colonies where the total abstinence reformation has made progress, the same results have been manifested.

The Rev. James Cox, Wesleyan Missionary, in a letter dated, St. Kitt's, West Indies, Nov., 1841, writes as follows: "The principle of total abstinence from all intoxicating liquor is progressing in these parts. In our church, in this island, comprising three thousand five hundred members, the most pious, respectable, and intelligent, including all our leaders, local preachers, stewards, &c., are all teetotalers; and this is one reason, among others, that we are enabled to propose to our missionary committee, in London, to support this mission without any expense to the parent society, after the present year! The work of God has spread among us greatly during the last year or two; we have had an accession of more than five hundred members to our churches; and (which is still better) teetotalism mightily contributes to their stability and purity. Oh! when will Christian ministers, generally, awake to the importance of this principle? Our Moravian brethren are also advocating the good cause in their congregations. In my native islands, the Bermudas, through the active exertions of the Rev. Mr. Pugh, Wesleyan Missionary, teetotalism is widely spreading, and doing much good. The excellent governor lately gave him fifty dollars for the purchase of tracts, &c. Three clergymen of the Church of England have espoused the blessed cause."

At the anniversary meeting of the Wesleyan Methodist Missionary Society, held in Bristol, May, 1837, a donation of £5 from the temperance society was presented to the treasurer, with the following note: "The enclosed sum of £5 is presented by the members of the Bristol Teetotal Society as a donation, in aid of the Wesleyan Missions; most of the contributors to this sum are labouring men, and several of them reformed drunkards, who, while gratefully acknowledging that abstinence from intoxicating liquor has been the means of preparing their minds for the reception of the glad tidings of the Gospel, conceive that there can be no better way for them to express their sense of the divine goodness and mercy towards themselves, than by contributing, according to their humble means, to convey the same blessed tidings to their perishing fellow-sinners in heathen lands." This is not a solitary instance. Contributions to benevolent and religious objects are frequently made under similar circumstances.

In the United States, the temperance reformation has been attended with equally pleasing results. A distinguished gentleman, from the State of New York, writes: "The great and good work of the Lord goes on in the midst of us; and the temperance movement, like John the Baptist, prepares the way of the Lord. One might follow in the wake of this movement, and say, 'The kingdom of heaven is at hand.'" Another gentleman, from a different part of the State, writes: "In this country, it is notorious that those towns which have been the most active in the temperance cause, have been the most blessed by the Holy Spirit. In all the towns in this country there have been revivals; and, as a general remark, it may be said, that in every town those neighbourhoods which have done most in the promotion of temperance have been most blessed in religious matters. In C——, the Spirit has seemed to follow the temperance effort from neighbourhood to neighbourhood, and so in other places. In short, so manifest is the connection between temperance and revivals of religion in this country, that we no more expect the latter where the former does not exist, than we expect snow in summer. This is of course a general remark. There are, undoubtedly, exceptions."

A third document corroborates the above statements: "A gentleman from Tennessee writes, that the formation of a temperance society in his vicinity was followed by such a revival of religion, as in those parts was never before known; that in numerous other places where temperance societies were formed, they were followed by the same glorious results; and that in a compass of about three miles, as the result apparently of the temperance reformation, more than three hundred persons were hopefully added to the Lord. And so generally has it been fol-

lowed by such results, that it is spoken of in various countries, and even on opposite sides of the globe, as John the Baptist preparing the way of the Lord. Whether the reason of this can be philosophically and satisfactorily explained or not, the fact is settled, that intoxicating liquor tends, from beginning to end, to increase human wickedness, and also to render that wickedness permanent. The men, therefore, who make it, and the men who furnish it, to be used as a drink, are, by their whole influence in doing this, increasing the vices and augmenting the woes of mankind. And though some of them profess to be friends of temperance, and to wish to have it prevail and become universal, they are taking the very course for ever to prevent it."

The pastor of the church in Lisbon, New Hampshire, still more recently (1842) gives an account of a revival in that place, in which about one hundred and twenty were added to the church. He remarks: "Indeed, temperance and religion go hand in hand. The most abandoned to intoxication are reclaimed, church members, see the light, acknowledge their errors, espouse the cause of temperance, and witness that they experience a new and blessed employment, and that their feet stand in larger places than before."

Many excellent and pious men, both in this country and in America, testify to these blessed results. The venerable *Thomas Clarkson*, the anti-slavery patriarch, in his eighty-second year, thus writes: "Though abstinence from fermented liquors, on the plan of the society, be not a teacher of moral duties, yet it has been found to be a great auxiliary to the conversion of sinners. For it is a fact, that where drunkards have been brought into sober habits by the institution, many thousands of them have gone to different places of worship which they never frequented before. Thus teetotalism, though it be not a teacher of the doctrines of Christianity, is constantly putting its converts into a situation to hear and to know them, and to reap the spiritual advantages which such instruction may afford. Thousands are thus reformed whom it is found that Christianity had not yet touched."

The Rev. W. Jay, of Bath, thus adds his personal as well as general testimony: "I am thankful that, all through life, I have been a very temperate man, and for more than twenty-five years, generally, a teetotaler, but for the last six years I have been one constantly and entirely. To this (now I am past seventy) I ascribe, under God, the glow of health, evenness of spirits, freshness of feeling, ease of application, and comparative inexhaustion by public labours, I now enjoy."

"The subject of teetotalism I have examined, physically, morally, and christianly; and after all my reading, reflection, obser-

vation, and experience, I have reached a very firm and powerful conviction. I believe that, next to the glorious Gospel, God could not bless the human race so much as by the abolition of all intoxicating spirits."

Numerous documents testify to the *influence of the temperance reformation on the good conduct and general welfare of the people*. In Ireland these changes have manifested themselves to a remarkable degree. The amiable and distinguished authoress, *Maria Edgeworth*, remarks, in reference to the village of Edgeworthstown, as follows: "The appearance of the working people, their quiet demeanour at markets and fairs, has wonderfully improved in general; and, to the knowledge of this family, many notorious drinkers, and some, as it was thought, confirmed drunkards, have been completely reformed by taking the pledge. They have become able and willing to work, and to take care of their farms and business, are decently clothed, and healthy, and happy, and now make their wives and children happy; instead of, as before the reformation, miserable and half heart-broken. It is amazing, and proves the power of moral and religious influence and motive, beyond any other example on record in history."

Mr. John Cadbury, of Birmingham, during a visit to the western part of Ireland, in August, 1842, among other interesting details remarks: "I was much pleased in a visit I paid to an extremely poor district, on the first day of the week, to find the children generally clean washed and neatly dressed, and the adult part of the people well dressed in suits of good broad cloth.—On inquiry, I was told they were enabled to do this by means of a plan very extensively put in practice by some of the shopkeepers, whose confidence in sobriety has induced them to supply a suit of clothes, to be paid for by weekly instalments; and I was glad to hear, also, that contracts so made had rarely been violated. This speaks well for their honour and honesty." And again: "I uniformly found them ready to join heartily in my recommendation of teetotalism. They often pointed to their bed, to a table, a few chairs and decent clothes, as the fruits of abstinence from whisky. Almost every hut, even the very poorest, contained a range of shelves against the walls, filled with painted dishes, plates, cups, saucers, &c., and around the other parts of the wall were highly-coloured pictures."

Mr. Robert Charleton, of Bristol, during a tour lately made in the south of Ireland, made similar observations. "One of the most striking results," he remarks, "is the improved aspect of the habitations of the poor. We visited many in the most inferior portions of the city of Limerick, and found scarcely a cabin destitute of a clean and

comfortable bed, and not only many of them supplied with the requisite articles of furniture, but with a good stock of earthenware; which, being arranged on the shelves, in regular rows, gives an air of great neatness and comfort. The children healthy and clean, and in general fairly clad, few exhibiting that ragged appearance formerly so general among this class. Great numbers, who were formerly in abject poverty, are now able to support their families in credit; and the quantity of oats saved from distillation has been so great as to leave in the country a larger proportion of grain, which is now available for food."

Mr. John Petherick, manager of the Knockmahon Mines, remarks, in reference to the men under his employ, as follows: "The vast improvement, both in the appearance and habits of the people, since they became temperate, is almost beyond belief; from being a most dissolute, idle, and untractable set of workmen, whom no advice could influence, or example improve—clothed in rags, and living, in many respects, worse, as regards personal comforts, even than the beasts of the field, and of course utterly divested of every feeling of self-respect, they are now the most industrious, orderly, and well-clad people in the empire, and they appear to appreciate so thoroughly the great improvement of their condition, consequent on the adoption of temperate habits, that I have the most perfect confidence in the permanence of this change. They have subscribed funds for the erection of a temperance hall and reading-room, which is now in the course of building, and will be completed very shortly, the expense of which will exceed £300."

Testimonies to the same effect, from various writers, are very numerous. They uniformly agree that an amazing change has taken place in the habits of the people of Ireland. Proportionate changes have attended the progress of temperance principles in Great Britain.

3. *The effects of temperance principles in the diminution of disorder and crime.* Copious statistical evidence is on record to show that crime has diminished in proportion to the spread of temperance principles. In Aberdeen, as before shown, there has been a diminution since the operation of the society of more than one half of the houses for the sale of strong drinks; and, remarks the Rev. R. G. Mason, "the reduction of crime has been in proportion to the diminution of public-houses." The number of convictions in 1837, was no less than 402; In 1840, it was but 215.

In Hull, a remarkable diminution of disorder has attended the spread of teetotalism, as the following digest of reports of prisoners taken into custody for drunkenness by the police will show:—

		Males.		Females.
In 1837	..	847	..	134
1838	..	674	..	106
1839	..	708	..	132
1840	..	529	..	118
Diminution in 1838	..	..	201	
Ditto 1839	..	..	60	
Ditto 1840	..	..	193	
Ditto 1841	..	..	125	

In 1837, for example, there were of cases of drunkenness, 847 males and 134 females; in 1841, 424 males and 98 females; showing the ratio of decrease in males one-half, and in females one-third. During this period, moreover, the number of inhabitants greatly increased.

In reference to Preston, *The Morning Chronicle* remarked, not long ago: "This town, which, six years ago, was one of the most drunken and profligate, is now one of the most sober and orderly towns in the kingdom. The best proof of this is the fact, that for the last six assizes held at Lancaster, instead of there being more criminals from Preston than from any other town, which was formerly the case, there have been no criminals at all, and the judges on the bench have publicly adverted to this remarkable change, and attributed it chiefly to the influence of the temperance society, in first making the people sober, and thus reclaiming them from all their various propensities."

The diminution of crime in Ireland, since the temperance reformation has been yet more extraordinary.

Lord Morpeth, in 1840, after detailing particulars of the returns of outrages reported to the constabulary office, by which it appeared, that, since 1836, they had diminished one third, remarked, that "of the heaviest offences, such as homicides, outrages upon the person, assault with intent to murder, aggravated assaults, cutting and maiming, there were

In 1837	..	..	12,096
1838	..	..	11,058
1839	..	..	1,077
1840	..	..	778 "

"Some months ago," says one of the Dublin prints, "one of the gaols, the Smithfield penitentiary, was entirely closed; and in the Richmond bridewell, 100 cells were empty; the committals to prison having fallen off 1,200 in the course of one year. The numbers committed there for the same period in three successive years were as follows: "1839, 3,202; 1840, 2,018; 1841, 1,604. This may be regarded as tolerably positive proof that crime is decreasing in proportion as temperance prevails."

The returns of the metropolitan police show, that, in six districts, the number of houses closed in one year formed a total of 237.

The assizes for March, 1840, in various counties, exhibit, to a remarkable extent, the influence of the temperance reform in the diminution of crime. The following extracts from the public papers exhibit a striking contrast:—

I.—Counties in which the temperance reform had made progress.

1.—COUNTY OF CORK.—Judge Perrin, one of the ablest, most observant, and painstaking judges on the bench, in Ireland, in addressing the grand jury of the county of Cork, said, “Gentlemen, I do not find any case in the calendar calling for particular observation by me. It is most satisfactory, gentlemen, to find there is not a single white-boy case, nor a charge of a tumultuous character.”

2.—COUNTY KERRY.—The same learned judge said: “Gentlemen of the grand jury, the tranquil state of your county is highly satisfactory, highly creditable to the inhabitants at large, for their moral, orderly, sober, and peaceful conduct.”

3.—COUNTY CLARE.—Judge Perrin received a magnificent pair of gloves from the high sheriff and grand jury of the County Clare, on the assizes having proved maiden.

4.—WATERFORD ASSIZES terminated yesterday, with a result highly gratifying to every one anxious to bear his testimony to the improved sobriety and morals of the people, since the very Rev. T. Mathew’s visit to Waterford. The grand jury of this city are about to memorialize the Lord Lieutenant of Ireland, to diminish the number of police stationed in that city, that force being unnecessary, in consequence of the great decrease of drunkenness; similar representations will be made from great towns all over the south of Ireland.

5.—DROGHEDA ASSIZES.—Judge Burton said, “there was no criminal case whatever on the calendar.”

6. and 7.—COUNTY AND CITY OF LIMERICK.—Judge Perry told the grand jury, he felt very great pleasure in congratulating them on the orderly, sober, tranquil, and peaceable state of that very populous city and its liberties.

8.—WICKLOW.—Judge Crampton said, he felt happy to say there was nothing on the face of the calendar which required the smallest observations from the court.

9.—LONGFORD ASSIZES.—Baron Penfather congratulated the grand jury on the absence of crime, and the general tranquillity which prevailed.

10.—MEATH ASSIZES.—There was not a case of a criminal nature whatever.

11.—COUNTY DOWN ASSIZES.—Judge Burton said, “Mr. Foreman, and gentlemen of the grand jury, I have looked over the calendar, and it is gratifying to me that your efforts to promote tranquillity have been attended with so satisfactory a result.”

12. — MAYO ASSIZES. — Mr. Serjeant

Green said: “Gentlemen of the grand jury, I do not find on the face of the calendar anything which calls for any observation from me.”

II.—Counties where the temperance reform had not been established.

DUNDALK ASSIZES.—Honourable Justice Torrens: “Mr. Foreman, and gentlemen of the grand jury, I wish I could congratulate you on the state of your county, but I cannot, in consequence of the number and magnitude of the crimes that appear on your calendar; I find on it burglaries, robberies, murder, all of which will come before you.”

CAVAN.—Baron Foster: “Thirteen persons received sentence for unlawful conduct; the cases and offences are numerous; you will devote immediate attention to the consideration of the cases.”

The same delightful change in the moral condition of the people did not decrease in 1841, as the following document will show:—

MR. JUSTICE CRAMPTON, at Clare—“congratulated the grand jury on the improved moral habits of the people since he before presided in the county, and the light state of the calendar for the present assizes.”

BARON RICHARDS, at Wexford: “As far as he could judge from the calendar and from inquiries he had made, the country presented a most enviable state of tranquillity.”

The Dublin Evening Post, in reference to the above, remarks: “that the grand jury, nearly to a man conservative, refused to present for increased accommodation in the gaol, and stated in open court to the judge, that it was upon the ground that the increased tranquillity and absence of crime in the country rendered such an expenditure unnecessary.”

The Waterford Mirror says: “There is not a single prisoner for trial at our approaching assizes. In the country the number is very small, and the cases trivial in character.”—Waterford contains more than 30,000 inhabitants.

The Sligo Champion says:—“The crown business is a mere trifle; we have not a dozen cases for trial, nearly all of which are for petty larcenies.”

The Dublin Evening Post says:—“At Kerry assizes, the prisoners for trial are twenty. In Clonmel (South Tipperary) the calendar contains but forty-eight, a fifth of the usual number in former times, for it should be borne in mind that eight months have elapsed since the summer assizes.”

The number of persons charged with the crime of murder within the Dublin police district, was, in 1838, fourteen; in 1839, four; in 1840, two; and in 1841, in the whole metropolitan district, only one individual was charged with the same fearful crime. This diminution of crime kept pace with the progress of the temperance move-

ment. The decrease in burglaries was in almost equal proportion. In 1839, the number of individuals arrested upon charges of burglary was seventy-six; in 1840, they had decreased to forty-eight; and in 1841, they had diminished to the comparatively small number of fifteen.

In the year 1838, there were forty-seven persons charged with breaking into and stealing from dwellings; in 1841, these cases had diminished to four.

There were eight cases of arson in 1838; and in 1841 there was only one case.

The addresses of the barristers, or chairmen of quarter sessions, to the grand juries assembled in the different towns, in 1841, afforded the most animating and encouraging proofs of the benefits which have been conferred by the temperance reformation. Mr. Hawley, Q. C., chairman of Tipperary sessions, described at considerable length the change that had taken place in the habits of the people. "The *factions*, with all their train of evil consequences, their barbarising effects on the habits of the people, their violence, their mutilations, their homicides, have wholly disappeared." "The temperance movement has gone back to a chief source of crime, restoring reason to that supremacy which drunkenness deposited."

Mr. Purcell O'Gorman, at Kilkenny, observed, in reference to the astonishing diminution of crime which had taken place, that the following were the results of the calendars for 1839 and 1840. "In the former, the number of cases was fifty-one. For January alone there were thirty-two. For January 1840, there were only nine charged, and four found guilty. For July, there were but four cases. For October, there were but four,—in fact only two. For the present January, there was but a single case of assault." At other towns, the reports were also most favourable.

4. *The influence of temperance operations on trade, wages, and the savings of the poor.*—The following interesting documents will illustrate this subject: in reference to Aberdeen, the Rev. R. G. Mason, in a letter dated from that city in 1840, remarks: "By the blessing of God on our prudent and persevering exertions, we are really achieving wonders on every hand. Moral and mental reform seems to be the all in all of the neighbourhood; and the benefit that thousands are deriving from the cause is truly astonishing. The bakers are selling more bread, the butchers are killing more meat, and the tailors are making more clothes."

The *Waterford Chronicle* of November, 1839, states, in reference to this subject: "We notice coffee shops already driving a thriving trade; the bakeries obliged to do double work; the shambles scarcely equal to the demand; the grocers quite satisfied with themselves." Again, the same paper,

of December in the same year, remarks: "In a highly respectable importing house in the city, the retail alone of coffee, tea, sugar, and cocoa, has increased to an enormous extent; that of coffee, for instance, 1 cwt. per diem; tea, one-half to three-quarters of a chest, ditto; sugar in the same ratio."

"Our meat shambles," says a writer from Dungarvan, Nov., 1839, "are crowded with the wives and daughters of tradesmen, labourers, and fishermen, laying out the money hitherto spent in whisky. The sale of tea, coffee, bread, oatmeal, and all other necessaries which may be deemed luxuries to the humbler classes, has increased in a ratio of 60 per cent, while the business of petty session courts, within a circuit of fifteen miles about Youghal and Dungarvan, has decreased in a ratio of 80 per cent."

A gentleman writing from Dublin in 1842 observes: "I am informed, by a very respectable baker, that in consequence of an increasing demand for soft bread, since the people left off drinking, he has now six men more in his employ than he used to have, in order to answer the increasing demands of the people."

The *Lincoln Mercury*, for 1842, relates the following interesting fact: "The advantages of the spread of teetotalism in Ireland are strikingly illustrated in the improved condition of many of the agricultural labourers who annually visit England at this season of the year, compared with the wretched state in which all for many years appeared, with rags barely sufficient to cover them, and their pallid looks indicating their love of ardent drink; articles of grocery were rarely needed; but now coffee and sugar have supplanted gin and whisky. This pleasing alteration forced itself on the notice of the principal tea-dealer in Boston, to whose shop multitudes of the sons of Erin have applied for the useful articles he vends, and a few days since one man purchased for himself and comrades thirty-five packages of coffee and sugar at one time."

The revenue returns bear out these statements. In 1839, the revenue from whisky was £1,510,092; in 1842, it was £964,711; or, a decrease of £545,381. The revenue from tea in 1841 produced £453,924. In 1842, however, it was £534,563, being an increase in one year of £80,000. A Dublin paper remarks, that the revenue returns for the port of Dublin, for the quarter ending October 10th, 1842, show an increase of £10,000 over the corresponding period of 1841. "The great consumption of tea and sugar, which may be attributed entirely to the improved habits of the working classes in Ireland, has alone caused this very pleasing result to the Exchequer."

The report of the temperance society for the city of Waterford, for the year 1841, states: "In this city and suburbs there are now at least £100,000 worth of value in the

cottages of the labouring classes, in clothes and furniture, over and above what they possessed two years ago, besides a considerable increase of lodgments in the savings' bank, made principally by the working classes. The healthy state of the city during this inclement year, and the last report of the fever hospital, speak loudly in favour of the cause."

The following extract from a recent report of the Irish Mining Company, is important. After stating that the profits for the last half year amount to nearly 23,000*l.*, a sum considerably exceeding that produced during any similar period, the directors candidly admit, that "a considerable part has arisen from the increased productiveness of the mines, and additional economy in working them; which latter has been greatly facilitated by the more sober and industrious habits of the men employed, who have thereby participated in the company's profits, as well as by an increase in the market value of mineral produce."

In regard to the diminished exports of food, a Dublin paper remarks: "The wheat and flour exported to England in 1833, amounted to 844,211 barrels; in 1841, it amounted only to 218,700 barrels, which tells greatly for the increased degree of comfort, as well as improved habits of the people."

Another Dublin paper remarks as follows: "The beneficial influence which total abstinence has exerted on trade, more especially home manufactures, in Ireland, is most gratifying. From the report of a late meeting of the Dublin Board of Trade, published in the *Dublin Weekly Herald*, we learn that a great improvement has taken place in different branches of business in that city, especially in those which are concerned in the production or sale of necessities. There has been a great revival experienced in the Irish cloth trade, and the demand for it, and other Irish manufactures, is now so great, that it is proposed to hold a weekly wholesale market in Dublin, for the convenience of the dealers in these goods. There are some very large hat manufactories in Dublin, and they are all brisk and doing much more business than formerly. As an instance of the good teetotalism has done to shopkeepers, it was stated to the meeting by the chairman, that Mr. Hawkshaw, a draper in Francis-street, had, during the last three months, increased his sales sixteen times the amount of what they were in corresponding periods of last year.

"Public works are also going on, and capitalists are beginning to employ their money in commercial pursuits, so that lucrative occupation will speedily be provided for thousands of the unemployed natives, and the good effects of this will soon be seen in their improved moral and social condition. Mr. Sheridan, the builder, stated, at

the above meeting, that he had received orders to erect a large paper-mill which would cost 4,000*l.*; and also that he had got orders from gentlemen to build flour and oatmeal mills. We rejoice to hear such tidings from Ireland, and trust she will go on increasing in happiness and peace, and true piety, till she indeed become, what we hope she will yet be, great, glorious, and free."

With regard to wages, the report of the Waterford Temperance Society informs us, that, at the Knoekmahon Mines, "the average amount of wages now paid monthly at those mines is about 2,300*l.* Heretofore, the same number of persons, at the same sort of work, earned usually about 1,900*l.*; besides, it is supposed that out of this they commonly spent, in using intoxicating liquors, about 500*l. a month.*"

The increased savings of the poor is forcibly displayed in the state of the savings' banks deposits. The following table is derived from the books of the Meath-street Savings' Bank Association, which has three branches; viz., one in Meath-street, one in Abbey-street (late Marlborough-street branch), and one in Linen Hall-street. It contains a period of three months; that is, the months of July, August, and September, in each of the three years.

	No. of Depositors.		
	1838	1839	1840
Meath-street	2323	2409	3019
Abbey-street	3419	3504	4030
Linen Hall-street . .	1522	1520	1904
Total	7264	7433	8953

The pressure of the depositors in the Abbey-street branch has since become so great that the committee have had to open the bank another morning in the week.

In 1841 the deposits amounted to 9,585*l.* The smallness of the deposits shows that they were made chiefly by persons in humble life. The years 1840 and 1841, of course, represent the period when the temperance reform had made considerable progress. The Rev. Mr. Mathews, the distinguished promoter of this great change, remarks:—"Not less than three or four hundred new books have been opened in the Cork Savings' Bank since the spread of temperance there." In Limerick, the deposits of the savings' bank are nearly quadrupled within the last three months, says the 'Chronicle' of that town. This is certainly a strong proof of the improved habits of the people; for, from whence, in a land swarming with pauperism, or, as professor Edgar once not inaptly styled it, "a land of whisky, beggary, and crime," could the pecuniary savings arise, if not from the abandoned use of alcoholic liquors?

5. *The effects of temperance principles on the diminution of disease and mortality.*—

The report of the American Temperance Union states that in Lyme, New Hampshire, in which had been sold annually about 6,000 gallons, the quantity sold that year was 600 gallons. "The bill of mortality, which had, for six years, upon an average, been annually $24\frac{1}{2}$, was reduced for two years to $17\frac{1}{2}$; in 1826, the year before the formation of the temperance society, the number of deaths under forty years of age was fifteen; in 1828 it was only nine." The same report adds, "that had every town in the United States pursued a similar course, that is, used but one-tenth the usual quantity of ardent spirits, and had it been followed by a similar result, the number of deaths, that year, would have been lessened more than 70,000."

In the Connecticut state prison, with an average of 120 convicts—more than 90 of whom were notoriously intemperate characters before their confinement—not one of whom was permitted to taste a drop of inebriating liquor after he entered the confines of the prison, there was no death for sixteen months, and but one death for about two years.

Mr. Bell, surgeon to the Cameronian regiment, at Fort William, Bengal, relates the following remarkable diminution of disease among the soldiers, since the establishment of a temperance society in 1837:—

Liver Complaints.	Consumption of Spirits.
1832 111	10,000 to 14,000 gallons.
1833 140	
1834 135	
1837 82	2,000 to 3,000 gallons.
1838 50	

The mean of the three years, when the large quantity of spirits was used, is 128 cases; while in the two years of temperance the number of cases is sixty-six, or about one-half.

The following additional table shows the effects of diminishing alcoholic consumption upon the troops in Bengal:—

1838.	Temp. Society.	Rem. of Regt.	Sick p. cent. Society.	Sick re. Regt. per cent
January . . .	1953	2569	2.54	8.15
February . . .	1840	2639	2.27	8.27
March	1542	2879	2.94	8.66
April	1359	3081	5.47	10.28
May	1282	3161	5.24	10.66
June	1364	3065	4.55	10.35

In a previous section the influence of temperance so highly favourable to recovery from wounds and other accidents was illustrated by several interesting examples. The following two testimonies, in reference to our soldiers in India, are equally forcible. Sir Robert Sale in his despatch, dated 16th of April, 1842, writes as follows:—"From the time that the brigade threw itself into Jellalabad, the native

troops have been on half, and the followers on quarter, rations, and for many weeks they have been able to obtain little or nothing in the bazaars to eke out this scanty provision. I will not mention, as a privation, the European troops from the same period having been without their *allowance of spirits*, because I verily believe this circumstance and their constant employment have contributed to keep them in the highest health and the most remarkable state of discipline. Crime has been almost unknown among them; but they have felt severely, though they never murmured, the diminution of their quantity of animal food, and the total want of coffee, tea, sugar, and flour."

Mr. Atkinson in his recent work on Affghanistan remarks:—"Only thirty-eight wound cases were received into our field hospital (at Ghuznee); six of them belonging to her Majesty's 13th Light Infantry, two to her Majesty's 2nd or Queen's, twenty-seven to the European Regiment, and three sepoy's of the 48th Regiment N. I. Three men of the European Regiment died in the hospital; one from a match-lock ball passing through his chest and injuring the back-bone, and the two others from match-lock balls penetrating the abdomen, so as to occasion the protrusion of the bowels. Happily the gun-shot wounds, the most dangerous, were few. All the sword-cuts, which were very numerous, and many of them very deep, united in the most satisfactory manner, which we decidedly attributed to the men having been without rum for the previous six weeks, the commissariat having none to give them. In consequence, there was no inflammatory action to produce fever, and interrupt the adhesion of the parts; a strong argument in favour of teetotalism."

The following corroborative testimony is extracted from a letter dated Jellalabad, and written by G. Godfrey, serjeant, 13th L. I., June, 1841:—"The work that was done by our men from November to April, in and about the fort, was surprising (even to themselves); the duty was very severe, and the rations inferior, and at times short of the full allowance. During that time no spirits were served out. There were no court-martials, and never was the regiment in such good health, as I can remember. The effect of abstinence from intoxicating liquor was plainly seen and acknowledged by officers and men."

Mr. James Haughton, of Dublin, whose connection with the fever hospital in Cork-street, as one of the board of managers of that valuable institution, remarks, in a letter dated April, 1842: "Teetotalism has almost banished that frightful disease, *delirium tremens*, from among the poor of our city. Previous to the temperance reformation, cases of this most fearful disorder were most frequent: often as many as four, five, or six

in a week, during the whole of the last year. I have not been able to ascertain that even one bad case has been known in the hospital; a few (not more, I believe, than three or four), of a mild character, have been received. I need scarcely make any comment on this fact."

In a letter written at Dublin, March, 1841, a resident of that city states: "Our public hospitals bear abundant evidence, also, of the improved health of the people. I was informed lately, by a young surgeon, that the want of broken limbs, &c., &c., is severely felt, as subjects for young practitioners; also, that there is a greatly increased difficulty in getting bodies for dissection. In our largest hospital, there has been but one case of *delirium tremens* (whisky fever) for several months, and even that a doubtful one; although formerly it was not uncommon to have twenty or thirty at one time. Deaths from fever have much decreased."

Mr. Cadbury, of Birmingham, in his visit of inquiry to Ireland, states, in reference to Limerick: "There is now no brandishing of shillelaghs, no rows, less crime, fewer inmates of the prisons, a great diminution of accidents and broken limbs resulting from them; less disease, and a great falling off in the consumption of drugs."

Mr. Robert Charlton observes, in reference to the same city: "The diminution of disease is another striking feature to be noticed. A druggist at Limerick gave me to understand, that the consumption of medicine at the dispensaries is wonderfully reduced, and that the number of broken limbs, and other casualties, is now so small that the surgeons at the Limerick hospital have comparatively nothing to do."

One of the correspondents of a recent Dublin paper writes as follows: "Our hospitals are giving striking evidence of the effects of temperance. I was conversing with one of the founders of the 'House of Recovery,' and with which he has long been connected. He was quite uneasy at the large old establishment of physicians, nurses, and servants, being still kept up, while there is so little for them to do! The average number of fever patients does not now, he says, exceed 100 to 110, while it used to be 300 to 400. This, I believe, is a pretty fair specimen of other hospitals, &c. The young surgeons are in a despairing state for want of a supply of patients with broken limbs, of whom, in bye-gone days, there was abundance."

Much additional statistical and documentary evidence on all the subjects treated in this section might be added. The foregoing facts, however, will suffice to show the nature and effects of that moral and physical regeneration which has already made such rapid strides. A few years more success, and the statistical information, which is now necessarily meagre, will assume a

more important aspect. In the meanwhile, it is desirable that the officers of all our public institutions should carefully collate all the facts which bear upon this important question. The interests of humanity demand it at their hands.

SECTION V.

WATER THE MOST SUITABLE BEVERAGE FOR MAN.

Wine is a mocker, strong drink is raging, and whosoever is deceived thereby is not wise.

PROVERBS.

Here's that which is too weak to be a sinner—honest water—which ne'er left man i' the mire.

SHAKESPEARE.

Though I look old, yet I am strong and lusty:
For in my youth I never did apply
Hot and rebellious liquors in my blood;
Nor did not, with unbashful forehead woo
The means of weakness and debility;
Therefore my age is as lusty winter—
Frosty but kindly.—SHAKESPEARE.

- I. The suitableness and excellence of water as a beverage.—II. Testimonies of eminent writers on the subject.—III. The health and longevity of water drinkers. 1. Nations and Communities. 2. Individuals.

I. *The suitableness and excellence of water as a beverage.*—The virtues and excellence of water have been landed from an early period, whether as a beverage or as a medicinal agent. The poet with truth describes it as—

The crystal element,
The chief ingredient in heaven's various works;
The vehicle—the source of nutriment
And life to all that vegetate or live.

ARMSTRONG.

Water is the natural and most suitable drink for man, and was the primitive beverage of the early ages of mankind. The records of history testify to its early and general use among heathen nations. The pages of Holy Writ teem with allusions to this scriptural beverage. It was the drink of the patriarchs. Solomon, in reference to its invigorating properties, says, "As cold water to a thirsty soul, so is goodness from a far country." The prophet Isaiah, in depicting the blessedness of the Church when under God's peculiar favour, represents the Almighty as saying, "I will pour water upon him that is thirsty, and floods upon the dry land." The sacred historian informs us, that when Samuel was wearied with the slaughter of the Philistines, so as to feel ready to perish, "God clave a hollow place in the jaw, and there came water thereout, and when he had drunk, his spirit came

again, and he revived." It was the drink of the Israelites in their passage through the wilderness. Elijah, although supplied with food by miraculous interposition, assuaged the demands of thirst from the brook Cherith. Obadiah supplied the hundred prophets of the Lord with "bread and water" for their food. It was the beverage of the smith while working at the forge in the time of Isaiah. Eliphaz preferred the unjust charge against Job, "Thou hast not given water to the weary to drink." God himself is characterised as "the fountain of living waters." The Saviour of mankind, when languid and fatigued, partook of this refreshing beverage at the hands of the Samaritan woman, and he declared, that whosoever should give but a cup of it to one of his disciples should by no means lose his reward.

The nature and characteristics of water stamp it as designed by Providence for the use of man. Of all other drinks it is the most healthful and refreshing in its effects. It is not only agreeable in its taste, but presents no temptation to excess. "Water," remarks old Tryon, "throughout the world in primitive times, and in most countries to this very day, has been, and is esteemed, the best drink, for that it gives to such as drink it a full satisfaction; whereas, all other sorts of drinks especially that exceed in any particular quality, do leave some desire behind, after a man has drank them, to drink more, though perhaps already he hath exceeded in quantity."* Water is the only drink provided by the hand of Omnipotence for the innumerable objects of his creation,—a signal proof that no other beverage is necessary for the wants and conveniences of man. Food, in exhaustless variety, in every clime and portion of the globe, is provided for his sustenance: the only fluid supplied by the agency of heaven is the crystal element of nature!

The virtues and advantages of water are numerous.

1. Water, of all other kinds of liquor, best quenches thirst.

2. It is the most suitable liquid to supply that waste of the moist or watery parts of the human system which it continually sustains.

3. It is the best dilutant of food, and materially promotes the functions of digestion.

4. Water possesses important medicinal properties, as universal experience testifies.

The due use of water tends to promote health, comfort, and long life.

A groundless prejudice exists in the public mind against the use of water, from the erroneous supposition that it is a dangerous beverage in hot weather, or during severe work. The temperate man, however, may use it with perfect freedom. In intemperate

persons only, *whose vital powers are at a low ebb*, are evil consequences likely to result. The committee of the New York Temperance Society, some years ago, after extensive investigation, ascertained that "of the published accounts of sudden deaths during the excessive heat of the summer, in every instance where the death was ascribed to the drinking cold water, or to the direct effect of the heat, the deceased was in the habitual use of ardent spirit; and not one instance was on record of such a death where the person was in the habit of entire abstinence." The Journal of Humanity for August 1830, contains the following corroborative statement: "Nine cases of death, from drinking cold water, have occurred among the labourers engaged in excavating the sections of the Bristol and Morris (New Jersey) canal, adjoining this place. We are assured by highly respectable physicians, that, in ninety-three cases out of a hundred, the victims of cold water-drinking are those who have been addicted to the free use of ardent spirits."

In the same journal, in a letter from Greenwich, Connecticut, of July, 1830, it is stated, that "during the preceding week, of excessively hot weather, no man who had been of cold water character for any length of time had given out; that two persons had died in the vicinity, but that both were of intemperate habits; that others had stopped work, but all of them were given to the use of strong drink." Again: the edition of the same journal of September, 1830, states the fact, "that nine-tenths, if not all, of the deaths from drinking cold water happen among those who are in the habitual use of ardent spirits." These statements are important and verified by every-day experience.

II. *Testimonies of eminent medical writers on the subject.*—Boerhaave, the distinguished writer, and lecturer on the *Theory and Practice of Medicine, Leyden University*: "If drink be merely required for allaying thirst and dryness, and diminishing the tenacity and acrimony of the fluids, then is cold water, when limpid, light, and without smell and taste, and obtained from a clear running stream, the best drink for a robust man. Food, not too fat, or gross, and water as a drink, render our bodies the most firm and strong."*

Hoffman, Frederick, *Professor of Physic at Halle, and Physician to the King of Prussia*: "Pure and light waters are agreeable to the different natures and constitutions of all men. 'No remedy can more effectually secure health and prevent diseases, than pure water.' The drinking of water is serviceable in every complexion. Water proves agreeable to persons of all ages. Drinkers of water, provided it be pure and excellent,

* Way to Health, &c., p. 245.

* Institutiones Medicæ, Leyden; 1713.

are more healthy and longer-lived than such as drink wine or malt liquors; it generally gives them a better appetite, and renders them plump and fleshy. Those who drink water are observed to have much whiter and sounder teeth than others. Drinkers of water are brisker and more alert, in all the actions both of mind and body, than such as use malt liquors. Water is a remedy suited to all persons at all times; there is no better preservative from distempers; it is assuredly serviceable, both in acute and chronic diseases; and its use answers to all indications, both of preservation and cure. The major part of the efficacy of mineral waters is, beyond all dispute, owing to the quantity of pure elementary water they contain.”*

Zimmerman, Physician to Frederick the Great, King of Prussia, and author of the celebrated work on “Solitude:” “Water is the most suitable drink for man; and does not chill the ardour of genius. Demosthenes’ sole drink was water.”†

Floyer, Sir John, a celebrated Physician, and author of a work on the History of Cold Bathing: “Water-drinkers are temperate in their actions, prudent and ingenious; they live safe from those diseases which affect the head, such as apoplexies, palsies, pain, blindness, deafness, gout, convulsions, trembling, and madness.—Water resists putrefaction, and cools burning heats and thirsts; and after dinner it helps digestion. To the use of this, children ought to be bred from their cradles, because all strong liquors are injurious to the constitution of children, whose spirits they inflame, and render them mad, foolish, rash, tender, and intemperate in their passions.”

Cullen, Dr., Professor of Medicine, University of Edinburgh, and author of celebrated works entitled, “A Treatise on the Materia Medica,” and “First Lines of the Practice of Physic:” “Simple water, such as nature affords it, is, without any addition, the proper drink of mankind. All drinks which supply the necessary liquid, (that is for the support of the functions of the animal economy,) do it only by the quantity of elementary water they severally contain.”‡

A Physician’s Observations communicated to Sir J. Sinclair, and published by him with others of a similar nature, in his “Code of Health and Longevity:” “In regard to diet, with a view to the preservation of health, no one rule is of so much importance, as to avoid all sorts of compound liquors, water being the only wholesome beverage, the best solvent and diluent of the solid portions of our food; supporting the tone of the stomach, without exhausting its vigour;

and furnishing the most simple, the most bland, and manifestly the most suitable supply to the secretory vessels, and general humidity of the body. In a word, good water is the only fit and salutary liquor for the ordinary uses of man; all others are noxious, and that in proportion as they recede in their qualities from water. There is no animal, man excepted, who does not reject these artificial liquors, (wine, and other fermented liquors,) with disgust; and from an impartial survey of human society in general, it will be found, that those who use water only, as their general beverage, are, *ceteris paribus*, the most free from disease; and retain the vigour of life, and its different functions, to a more advanced age.”

Londe, a French writer, and author of a work on Hygiene: “Water is, of all drinks, that which, by its constant use, is best fitted to aid in prolonging the life of man.”*

Kitchener, Dr., author of “Directions for Invigorating and Prolonging Life,” &c.: “Among other innumerable advantages which the water-drinker enjoys, he saves a considerable sum of money per annum, which the beer and wine drinker wastes, as much to the detriment of his health as the diminution of his finances; moreover, nothing deteriorates the sense of taste so much as strong liquors; the water-drinker enjoys an exquisite sensibility of palate, and relish for plain food, that the wine-drinker has no idea of.—Happy are the young and healthy, who are wise enough to be convinced that water is the best drink, and salt the best sauce.”

Barton, Dr., author of a work, entitled “Hints for Naval Officers cruising in the West Indies:” “A more robust and vigorous state of health could scarcely be found than generally prevailed (among the officers of a vessel called The Brandy-Wine, during a cruise) in the steerage, with one exception of convulsive disease; and yet, these gentlemen are well deserving the remark, one and all, of most entire temperance, having drunk water only in their messes during the whole cruise. I am of opinion, that young officers should drink nothing, habitually, but water; because, I think water is decidedly the most conducive to vigorous health.”

Rush, Dr., the American Hippocrates, and author of several well-known works: “I maintain, with confidence, that spirituous liquors do not lessen the effects of hard labour upon the body. Look at the horse, with every muscle of his body swelled from morning till night, in the plough or the team; does he make signs for spirits to enable him to cleave the earth or to climb a hill?—No. He requires nothing but cool water and substantial food. There is neither strength nor nourishment in

* *Dissertatio Physico-Medica*, vol. ii. New Experiments and Observations upon Mineral Waters.

† *Treatise on Experience in general, and especially in the Healing Art.* Chapter “On Drinks.”

‡ *Mat. Med*, part i., chap. 3.

* *Nouveaux Elemens d’Hygiene*, tom. i., p. 150.

spirituous liquors; if they produce vigour in labour, it is of a transient nature, and is always succeeded with a sense of weakness and fatigue. These facts are founded on observation, for I have repeatedly seen those men perform the greatest exploits in work, both as to their degrees and duration, who never tasted spirituous liquors."

Oliver, Dr., Professor of the Theory and Practice of Medicine, Dartmouth College, America: "The waste of the fluid parts of our bodies requires the use of drink to repair it, and we derive a sensible gratification from quenching our thirst. What use do we make of this fact? Why, to try if we cannot find something that we shall take pleasure in drinking, whether we are thirsty or not; and in this search mankind has been remarkably successful. To such a degree, indeed, have we succeeded in varying and increasing a pleasure which was designed by nature merely as an incentive to quench our thirst, that to quench thirst is become one of the last things that people drink for. It is seldom, indeed, that people in health have any natural thirst, except, perhaps, after exercise or labour in a hot day. Under all other circumstances, we anticipate the sensation by drinking before it comes on, so as but seldom to enjoy the natural and healthful gratification of drinking because we are thirsty. Who has not observed the extreme satisfaction which children derive from quenching their thirst with pure water; and who that has perverted his appetite for drink, by stimulating his palate with bitter beer, sour cider, rum-and-water, and other brewages of human invention, but would be a gainer even on the score of mere animal gratification, without any reference to health, if he could bring back his vitiated taste to the simple relish of nature? Children drink because they are dry; grown people drink, whether dry or not, because they have discovered a way of making drinking pleasant. Children drink water because this is a beverage of nature's own brewing, which she has made for the purpose of quenching a natural thirst; grown people drink anything but water, because this fluid is intended to quench only a natural thirst, and natural thirst is a thing which they seldom feel.

"One of the evils, though not the only nor the greatest one, of perverting the natural appetite of thirst, is, that it leaves us without a guide to direct us when we need drink and when we do not. There is no danger, it is true, that this want will lead us into drinking too little; the danger is, that we shall be betrayed into drinking too much, *i.e.*, when nature does not require it; and such, no doubt, is frequently the case. If a man is fond of some particular drink (and most people have their favourite liquor), he will be tempted to take it when he does not really need it. This consideration points out the wisdom of nature, in providing for

us a beverage which has nothing to tempt us to drink, except when we are really thirsty. At all other times, water is perfectly indifferent, or it is disagreeable to us; but when we labour under thirst, *i. e.*, when nature requires drink, nothing is so delicious to a pure, unadulterated taste. While we adhere to this simple beverage, we shall be sure to have an unerring prompter to remind us when we really require drink; and we shall be in no danger of being tempted to drink when nature requires it not. But the moment we depart from pure water, we lose this inestimable guide, and are left, not to the real instincts of nature, but to an artificial taste, in deciding on actions intimately connected with health and long life. What is more common than for a man to take a glass of beer, or cider, or wine, or rum-and-water, not because he is thirsty and really needs drink, but because opportunity makes it convenient, and he thinks it will taste well? And this is true, not only of fermented or distilled liquors, which are directly injurious in other modes, but, in a less degree, of any addition made to pure water to make it more palatable. Let me be not misunderstood: I am far from insinuating that lemonade, soda-water, and milk-and-water, are hurtful drinks. Far from it. But I say, that in using even these mild and healthful beverages, we lose one important advantage we should derive from the use of pure water alone. If they are more palatable to us than water (and otherwise we should have no motive to use them), we shall be tempted to take them oftener and in greater quantities than is required by nature, and may thus unconsciously do ourselves an injury. It is rare for a person to drink a glass of water when he is not thirsty, merely for the pleasure of drinking; and, as thirst is the natural guide, if he drinks when not thirsty, he takes more fluid than nature points out as proper, and so far violates one of her obvious laws. But it may be asked, if any injury can result from drinking more than nature absolutely requires? Not perhaps in particular instances, but the habit of drinking more may undoubtedly be injurious. It is a sufficient answer to all these questions to say, that our Creator knows best. Under the guidance of the instincts he has implanted in us, we are safe; but as soon as we leave these, and place ourselves under the direction of our own educated appetites, we are constantly liable to be led into danger. It is certainly hurtful to drink habitually more than was intended by nature, because it imposes upon the constitution the task of removing the excess; or else it is retained in the system and there may lead to dropsy, or to some other of the consequences of the plethora, or redundancy of fluids in the system."

Van Swieten, Physician to Maria Theresa

Empress of Austria, and author of "Commentaries on Boerhaave:" "Miserable is the condition of those who daily indulge themselves in the use of wine and spirits, for a fatal necessity then follows of repeating them; and at length almost the whole system of the vital and animal actions depends upon a continuance of them."*

Arbuthnot, a scholar and wit of celebrity, characterized by Dr. Johnson as "a man estimable for his learning, amiable for his life, and venerable for his piety:" "Water alone is the proper drink for every animal."

Leake, Dr., a Physician of note, and author of several important medical works: "Pure water is the fluid designed by nature for the nourishment of all bodies, whether animal or vegetable. Water-drinkers are observed to be more healthy and long-lived than others. In such, the faculties of the body and mind are more strong, their teeth more white, their breath is more sweet, and their sight more perfect than in those who use fermented liquors and much animal food."

Parr, Dr., author of the "Medical Dictionary:" "Water, as it is the most ancient, so it is the best and most common fluid for drink, and ought to be esteemed the most commodious for the preservation of life and health."

Saunders, Dr., F.R.S., author of a "Treatise on Mineral Waters," and the "Structure, Economy, and Diseases of the Liver:" "Water-drinkers are, in general, longer lived, are less subject to decay of the faculties, have better teeth, more regular appetites than those who indulge in a more stimulating diluent for their common drink."

Hufeland, Dr., Physician to the King of Prussia, a distinguished Professor, editor of a Medical Journal, and author of "The Art of Prolonging Life:" "The best drink is water,—a liquor commonly despised, and even considered as prejudicial. I will not hesitate, however, to declare it to be one of the greatest means for prolonging life. The element of water is the greatest and only promoter of digestion. By its coldness and fixed air, it is an excellent strengthener and reviver of the stomach and nerves. On account of its abundance of fixed air, and the saline particles it contains, it is a powerful preventive of bile and putrefaction. It assists all the secretions of the body."

Faust, author of a "Catechism on Health," and Physician to the reigning Count of Schaumburg Lippe: "Cold water is the most proper beverage for man as well as animals—it cools, thins, and clears the blood—it keeps the stomach, head, and nerves in order, and makes man tranquil, serene, and cheerful."

Gregory, successor of Cullen, in the Chair of Practical Medicine, Edinburgh, and au-

thor of the "Couspectus Medicinæ Theoretica:" "The sole primitive and mainly natural drink is water; which, when pure, whether from a spring or river, has nothing noxious in it; and is suitable and adapted to all sick persons, and all stomachs, however delicate and infirm, unless, through depraved habit, fermented liquor should have become necessary. Pure spring-water, when fresh and cold, is the best and most wholesome drink, and the most grateful to those who are thirsty, whether they be sick or well: it quenches thirst, cools the body, dilutes, and thereby obtunds, acrimony—often promotes sweat, expels noxious matters, resists putrefaction, aids digestion, and, in fine, strengthens the stomach."*

Cheyne, Dr. George, F.R.S., author of "An Essay on Health and Long Life," and other well-known works: "Without all peradventure, water was the primitive original beverage; and it is the only simple fluid fitted for diluting, moistening and cooling,—the ends of drink appointed by nature. Happy had it been for the race of mankind, if other mixed and artificial liquors had never been invented. It has been an agreeable appearance to me to observe, with what freshness and vigour those who, though eating freely of flesh meat, yet drank nothing but this element, have lived, in health and cheerfulness, to a great age. Water alone is sufficient and effectual for all the purposes of human wants and drink."

Reid, Dr., a celebrated Physician, and author of several well-known works: "Water is of inestimable benefit to health; and as it neither stimulates the appetite to excess, nor can produce any perceptible effect on the nerves, it is admirably adapted for diet, and we ought, perhaps, by right, to make it our sole beverage, as it was with the first of mankind, and still is with all the animals. Pure water dissolves the food more, and more readily, than that which is saturated; and likewise absorbs better the acrimony from the juices; that is to say, it is more nutritious, and preserves the juices in their natural purity; it penetrates more easily through the smallest vessels, and removes obstructions in them; nay, when taken in a large quantity, it is a very potent antidote to poison."

"From these main properties of water may be deduced all the surprising cures which have been effected by it in so many diseases."

Richerand, the eminent French Physician, and author of several works of great importance: "Simple aqueous drinks promote digestion, by facilitating the solution of the solids, by serving as a vehicle to their divided parts. The least compound drinks are possessed, in different degrees, of the double property of dissolving solid aliments,

* Commentaries, vol. v., p. 322.

* Couspect. Med. Theor., sect. 125-7

and stimulating the digestive organs. The purest water is rendered stimulating by the air which it contains in different proportions."

Rostan, a very eminent Physician and writer: "Water is, beyond question, the most natural drink—that of which man made use of in times of primeval manners. Abstemious persons are not pale and weak, as supposed—this effect only occurs when water is drunk to excess. Those who take it in moderation enjoy, to a very high degree, all the faculties, as well moral as intellectual, and often attain advanced age."*

Mussey, Dr., Professor of Anatomy and Surgery, Dartmouth College, N.H., President of the New Hampshire Medical Society, Fellow of the American Academy of Sciences, and author of a Prize Essay on Temperance: "Water is as well adapted to man's natural appetite as to the physical wants of his organs. A natural thirst, and the pleasure derived from its gratification, were given us to secure to the vital machinery the supply of liquid necessary to its healthy movements. When this natural thirst occurs, no drink tastes so good, and, in truth, none is so good as water; none possesses adaptation so exact to the vital necessities of the organs. So long as a fresh supply of liquid is not needed, so long there is not the least relish for water; it offers no temptation, while its addition to the circulating fluids would be useless or hurtful."

Pratt, Dr., Author of "A Treatise on Mineral Waters:": "If people would but accustom themselves to drink water, they would be more free from many diseases, such as tremblings, palsies, apoplexies, giddiness, pains in the head, gout, stone, dropsy, rheumatism, piles, and such like; which diseases are most common among them that drink strong drinks, and which water generally would prevent. Water, plentifully drank, strengthens the stomach, causeth an appetite, preserves the sight, maketh the senses lively, and cleanseth all the passages of the body, especially those of the kidneys and bladder. Water is a wholesome drink, or rather the most wholesome, being appointed for man in his best state; which both strongly argue that drink to be the most suitable for human nature, answering all the intentions of common drinks, for it cools, moistens, and quenches thirst; 'tis clear, thin, and fit to convey the nourishment through the smallest vessels of the body, and is a drink that is a rule to itself, and requires little caution in the use of it, since no one will be tempted to drink of it more than he needs. In the primitive ages of the world, water-drinkers were the longest lived by some hundreds of years, nor were they so often sick and complaining as we are."

Duncan, Dr., author of a "Treatise on Hot

Liquors:" "When men contented themselves with water, they had more health and strength; and, at this day, those who drink nothing but *water* are more healthy and live longer than those who drink strong liquors, which raise the heat of the stomach to excess, whereas water keeps it in due temper. Such, whose blood is inflamed, live not so long as those who are of a cooler temper; a hot blood being commonly the cause of flushes, rheums, ill digestion, pains in the limbs, headache, dimness of the sight, and especially of hysteric vapours."

Dr. Keill, author of the "Abridgment of the Anatomy of Human Bodies:": "Water seems the fittest to promote the digestion of food; all spirituous liquors having a property by which they hurt rather than help digestion."

Dr. Fothergill, an eminent Physician and writer: "Nature has pointed out that mild and insipid fluid, water, as the universal diluent; and, therefore, most admirably adapted for our daily beverage."

Dr. Mackenzie, author of "History of Health and the Art of Preserving it:": "Pure, light, soft, cold water, from a clear stream, drank in such a quantity as to quench their thirst, to dilute their food, and to cool their head, is the best drink for children, for hearty people, and for persons of a hot temperament."

Dr. Stukely, a well-known medical writer: "Water, whether taken ordinarily, or medicinally, and in small proportions, is exceedingly useful. It is the noblest diluent and digester in the world."

Dr. L. A. Tissot, author of a work on "The Diseases of Literary Men:": "Water is a drink nature has given to all nations, made it agreeable to all palates, and endowed it with the property of dissolving the aliments. It is an efficacious medicine in all cases where moisture is deficient, where we are troubled with acidities, or where the bile has acquired too much sharpness. It greatly assists digestion, prevents obstruction, keeps up all evacuations, makes sleep more calm, the head clear, cheerfulness more lasting, and the symptoms more gentle. If the effects of wine are compared with these, we shall find every part of the comparison in favour of water."

Dr. Garnett, formerly Professor of Natural Philosophy and Chemistry in the Royal Institution, and author of "A Lecture on the Preservation of Health," &c.: "While we are eating, water is certainly the best beverage. The custom of drinking fermented liquors, and particularly wine, during dinner, is a very pernicious one. The idea that it assists digestion is false; those who are acquainted with chemistry know that food is hardened and rendered less digestible by these means. If food wants diluting, water is the best dilutant, and will prevent the rising, as it is called, of strong food much better than wine or spirits."

* Art. Eau Diet. de Med.

Mr. Sandford, author of "Remarks on Wine and Spirits," says: "The very great benefits I have myself experienced, in exchanging the usual stimulant beverage of fermented liquors for a more diluting one, leave me no hesitation in pronouncing pure spring water to be unquestionably (with some few exceptions) the best liquor to be taken with our meals, though condemned as prejudicial by some, and rejected for no just reason by others. The following advantages resulting from its use may possibly recommend it to those who are unacquainted with its general properties; viz., that it is a great promoter of digestion in healthy stomachs, and by its coldness assists to lower the heat usually generated in this process. It is a powerful preventive of biliary concretions, or gall-stones, as they are called, and of urinary calculi, or gravel. It also assists all the secretions of the body; and as, according to the latest satisfactory experiments of Lavoisier, oxygen, or vital air, is a component part of it; by drinking water we actually receive fresh vital power. It is a liquor, too, which may be found naturally in all climates, and is agreeable to most palates; many take no other drink during their whole lives, and yet enjoy good health, though engaged in laborious occupation,—a proof that water is well suited to answer every purpose of the animal economy."

Dr. Shirley Palmer: "The question has frequently been put to us, What is the best fluid to assist in the digestion of solid food? and our reply has invariably been, Water,—pure unadulterated water. And such is the relish, such the zest for food, which the use of this delightful fluid as a beverage gives to a stomach unsodden and unsophisticated by the stimulating compounds of alcohol; such the latitude of indulgence in solid aliment which it allows; such the vigour which it imparts, not only to the mind but to the organs of digestion: and such the comfort and facility with which it enables those organs to perform their all-important functions, that the epicure himself is no less interested than the man of letters and the philosopher, in for ever abjuring the worship of Bacchus, and turning from his hateful and polluted altars to the pure and crystal shrine of the goddess of the fountain."

III. *The health and longevity of water drinkers.* 1. *Nations and Communities.*—On this subject, both ancient and modern history present us with some remarkable facts. A few examples only will be adduced.

The Gauls.—"They generally lived 110 years; which was entirely owing to their temperance and mode of living. They laboured much, ate little, and never the flesh of animals, and drank no wine. They rose before the sun; inconstancy, variety, and changeableness, so ordinary to their descendants, were not then known, nor agitated

their mind and imagination. By such a regimen did our forefathers arrive to an extreme old age. It was the only step to be admitted into the order of the Druids, or the priests and religious of those days."*

American Indians.—"At the first arrival of the Europeans in America, it was not uncommon to find Indians, who were above 100 years old. They lived frugally, and drank pure water. Brandy, rum, wine, and all the other strong liquors, were utterly unknown to them. But since the Christians have taught them to drink these liquors, and the Indians have found them but too palatable, those who cannot resist their appetites hardly reach half the age of their parents."†

Natives of Shetland.—"In Shetland, the inhabitants give an account of one Fairvill who arrived at the age of 108, and who never drank any malt liquor, distilled waters, nor wine. They say his son lived longer than he, and that his grandchildren lived to a great age, and seldom or never drank any stronger liquors than milk, water, or bland. This last is made of buttermilk mixed with water."‡

Natives of Sierra Leone.—"The natives of Sierra Leone, whose climate is said to be the worst on earth, are very temperate; they subsist entirely on small quantities of boiled rice, with occasional supplies of fruit, and drink only cold water; in consequence, they are strong and healthy, and live as long as men in the most propitious climates."§

The Kaffres.—"Milk is their ordinary diet, which they always use in a curdled state; berries of various descriptions, and the seeds of plants, which the natives call plantains, are also eaten, and a few of the gramineous roots with which the woods and the banks of the rivers abound. Occasionally, too, the palm bread of the Bosjesmans is found among them. Their total ignorance of the use of ardent spirits and fermented liquors, and their general temperance and activity, preserve them from the ravages of many disorders which abound amongst the other native tribes, to say nothing of the value of their independence."||

The Circassians.—"Owing to their robust frames, and temperate habits, the Circassians generally attain an advanced age, their diseases being neither numerous nor dangerous. Their favourite beverage is the *skou*, a species of sour milk peculiar to the East."¶

The Brahmins.—"Their temperance is so great, that they live upon rice or herbs,

* Long Livers, by Eugenius Philalethes; 1722, p. 112.

† Kalm's Travels in Pinkerton's Collection, part liii., page 494.

‡ Pinkerton's Voyages and Travels, part xvii., p. 693.

§ Monthly Magazine, July, 1815, p. 528.

|| Barrow's Travels.

¶ Travels in Circassia, by J. Spencer, 1837.

and upon nothing that has sensitive life. If they fall sick, they count it such a mark of intemperance, that they will frequently die from shame and sullenness; many have lived 100 and some 200 years.”*

The Society of Friends.—The comparative longevity of Quakers, or the Society of Friends, has been stated in a previous section. As a body, it is well known that they are remarkable for their regular and temperate habits. Some years ago, with a view to the establishment of a Life Assurance for their own body, they instituted inquiries, which resulted in the following interesting facts. Among other sources of information which received careful investigation were the public register of the parish of Chesterfield in Derbyshire, and that also of the Chesterfield monthly meeting of Friends. The united ages of 100 individuals successively buried in Chesterfield church-yard, ending November 16, 1834, were 2,515 years and six months. This made the average of each life to be twenty-five years and two months. The above estimate of course includes a fair average of the general population, whether temperate or intemperate. Of 100 individuals, however, buried amongst the Friends, ending the 27th of November, 1834, the total of their ages was 4,790 years and seven months, that is, nearly double that of the general population. Only two of the 100 buried in the Chesterfield church-yard reached 80 years and upwards. Among the Friends, 19 had attained to 80 and more. Twelve only of the number buried in the church-yard reached the age of 70 and upwards; but of those who died among the Friends, 30 were at least 70 years old. The “Annual Monitor” of the same respectable society contains an authentic list of the names, residences, and ages, of such members as have died in each year throughout Great Britain. In this document for 1836, rather more than 200 adults are recorded, of whom 90 were from 70 to 98 years old, or an average of 80 years each. Of these one-fourth were from 78 to 98, and 10 produced an average of full 94 years. These facts urge strongly the claims of temperance and regular living. The Quakers, although not professedly abstainers from strong drink, yet, as a class, refrain from free indulgence in these pernicious compounds.

The temperance and longevity of the early settlers of New England, is well known in the United States. But a few years ago, the “Journal of Commerce” detailed the circumstance of five persons in New Hampshire, who had attained to the age of 110 years. Several of the early settlers of that district lived to nearly 100 years of age. From 1709 to 1840, 163 persons died in New Hampshire, who had

either entered upon their 100th year, or had exceeded a complete century. Their names, residences, time of death, &c., are on record.

2. *Individuals.*—Dr. Farre gives it as his opinion, that, “by the last grant of Providence to man, his life is 120 years; and that, where disease, arising from other causes, does not shorten it, the reason why so few attain to that age is to be found in the excessive stimulation to which the mass of the community are continually subject.” The Psalmist exclaims, “The days of our years are threescore years and ten, and if by reason of strength they be fourscore years, yet is their strength labour and sorrow!” Moses, however, who was the author of this psalm, does not intend to refer to the lives of men in general, but to the condition of the Israelites then in the wilderness. It was a judgment of the Almighty for the sins of his people: “For we are consumed by thine anger, and by thy wrath are we troubled.”*

The patriarchs of Scripture were remarkable for their longevity, and we have already seen that water was their ordinary beverage. Abraham lived to the age of 175 years. Isaac and Ishmael, his sons, also died at an extreme old age. Isaac was at his death 180 years old, and Ishmael 137. Jacob attained the age of 147, and his son Joseph died at 110. The life of Moses extended to 120 years, and the inspired historian records of him, that in his declining years “his eye was not dim, nor his natural force abated.” Joshua, Daniel, and other Scripture characters, also lived to an advanced period.

Numerous additional examples of longevity among the ancients are on record. In the History of the Maccabees, we are told that Mattathias died 146 years old. St. John the Evangelist was more than 100 years of age at his death. Simon Cleophas, successor of St. James, and the second Bishop of Jerusalem, was crucified under the Emperor Trajan, in his 120th year.—Narcissus, the successor of Cleophas, died, aged 166, under Septimus Severus. Oldus Magnus, records the fact, that David, an English bishop, died aged 170. St. Paul, the hermit, died aged 113; his diet was water and dates. His companion, Cronius, lived 125 years. St. Anthony lived 105 years; bread and water formed his ordinary food. James, the hermit, to 104 years; St. Epiphanius, to 115; St. Jerome, to about 100; Simeon Stylites, 109; Romualdus, 120; and Arsenius, the tutor of the Emperor Arcadius, to 120 years. Pietro della Valle informs us, that, in 1626, Father Gaspar Dragonette, a jesuit, then aged 120, was not only fresh and strong, but had all his teeth; used no spectacles, and daily read his lectures in the college of Rome with lively and impressive

* Sir William Temple.

* Psalm 90., v. 7. 10.

eloquence. About the commencement of the 10th century, there were in the abbey of Croylard three monks who died at an extraordinary age. One of them, named Clerambaut, lived 148 years; another called Swarlingue, 142 years; and the third, whose name was Turgar, died 115 years old.

Detailed accounts of great numbers of individuals who lived to an immense period of life are given in various works. It will be impossible to adduce more than a few, and those chiefly of more recent date. Buchanan speaks of one Lawrence, who, by his temperate and laborious habits, attained to the age of 140 years. Spotswood mentions that Kentigern (afterwards called St. Mongah) lived to the age of 185 years.—From an early period he refrained from the use of wine and strong drinks. Bollandus affirms the same fact.

Earl Stanhope and family: “My father was a weakly child; he was taken early to Geneva, where a celebrated medical professor, who had formerly been a pupil of the great Boerhaave, was consulted on his case. He advised that he should use much exercise, and drink nothing but water. He adhered strictly to that advice; and when, in after years, his habits became sedentary, he still used only water. He became clear and vigorous in his various energies of body and mind, and exerted his faculties almost to the last moment of his life. My grandfather was also a water-drinker, and was vigorous and active in body and mind; and even at the age of seventy-two devoted several hours a day to abstruse mathematical studies. My grandmother, whose health for years was weak and feeble, drank only water; but she enjoyed to an extreme old age the use of her ordinary faculties; nor did she feel uncomfortably exhausted when near her dissolution, which took place when she was ninety-three years of age.”*

Rev. John Wesley: “I can hardly believe that I am this day entered into the 68th year of my age! How marvellous are the ways of God! How has he kept me even from a child! From 10 to 13 or 14, I had little but bread to eat, and not great plenty of that. I believe this was so far from hurting me, that it laid the foundation of lasting health. When I grew up, in consequence of reading Dr. Cheyne, I chose to eat sparingly, and drink water. This was another great means of continuing my health till I was about 27. I then began spitting of blood, which continued several years. A warm climate cured this. I was afterwards brought to the brink of death by a fever, but it left me healthier than before. Eleven years after, I was in the third stage of a consumption: in three months it pleased God to remove that also. Since that time I have known neither pain nor sickness, and am now healthier than I was forty years

ago! This hath God wrought.” At the age of 82, Mr. Wesley observes: “To-day I entered on my 82nd year, and found myself just as strong to labour, and as fit for exercise in body and mind, as I was forty years ago.” Again: “I am as strong at 81 as I was at 21, but abundantly more healthy, being a stranger to the headache, toothache, and other bodily disorders which attended me in my youth.” Also at the age of 83, he remarks: “I am a wonder to myself: it is now twelve years since I have felt any such sensation as weariness. I am never tired (such is the goodness of God!) either with writing, preaching, or travelling; one natural cause, undoubtedly, is my continual exercise and change of air.”*

Dr. Baynard, in an appendix to Sir John Floyer's “History of Cold Bathing:” “As water is in chief the universal drink of all the world, both animals and vegetables, so it is the best and most salubrious; for without it no plant or creature could long subsist. That good and pure water has a balsamic and healing quality in it, I could give many instances, as well externally in curing of wounds, as internally, as ulcers, excoriations, &c. For I once knew a gentleman of plentiful fortune, who, by some accident, fell to decay; and, having a numerous family of small children, whilst the father was a prisoner in the King's Bench, he was reduced almost to want; his wife and children living on little better than bread and water. But I never saw such a change in six months' time, as I did in his unhappy family; for the children, that were always ailing and valetudinary, as coughs, king's-evil, &c., were recovered to a miracle, looked fresh, well-coloured and lusty, their flesh hard and plump. But I remembered the mother told me, it being a plentiful year of fruit, she gave them often baked apples, with their coarse bread, which, I think, might very much contribute to their health. And that most remarkable story of Alexander Selkirk, a Scotchman, who from a leaky ship, was, upon his own request, set on shore on an island in the South Sea, called Juan Fernandez, about the latitude of thirty-three degrees, where he lived four years and four months, by himself alone, and eat nothing but goat's flesh and drank water, having neither bread nor salt, as he told me himself at Bath, where I met him; and that he was three times as strong, by exercise, as ever he was in his life. But, when taken up by the two ships, the Duke and Duchess, sent out from Bristol for the South Sea, that eating the ship fare with the other seaman, and drinking beer and other fermented liquors, his strength by degrees began to leave him, like cutting off Samson's hair, *crinitim* (to make a word), or lock by lock, so that in

* Speech at Exeter Hall.

* Wesley's Journal, vol. iii., p. 391; and vol. iv., p. 276.

one month's time, he had not more strength than another man. I insert this relation to show that water is not only sufficient to subsist us as a potent drink, but that it liquifies and concocts our food better than any fermented liquors whatsoever; and even those strong and spirituous liquors, were it not for the watery particles in them, would prove altogether destructive, and so far from nourishing, that they would inflame and parboil the tunicles of our stomachs, as is daily seen, and especially in the livers of most clareteers, and great drinkers of other strong liquors."

John Bailes. Related by Dr. Baynard.

About two years and a half since, going into the north country, and lying at Northampton, I desired my landlord of the inn to show me the famous old man so much talked of. When I came into his room, I saw a short, broad-breasted old fellow sitting down by the fire-side on a low stool. I asked him how old he was; he answered me, that he was 128 and a half. I found, by the nicest inquiry I could make, that he was not far short of that age, as appeared by the testimony of several people, some near, others above, 100; and they all say, that he seemed to be an old man ever since they could remember; that he was born in the town, but before registers were used, &c. He had a very strong voice, and spake very heartily and loud. He said (not designing it as a jest), that he should never die so long as he could breathe freely, which is no small happiness. This old man, whose name was John Bailes, told me that he had buried the whole town of Northampton, except three or four, twenty times over. 'Strong drink,' quoth the old man, 'kills 'em all.' He told me that he never was drunk in his life, and that water, small beer, and milk were his drink, sometimes taken *per se*, sometimes mixed; and that his food was, for the most part, brown bread and cheese; he cared not much for flesh meats. He was a sensible old fellow, and had no disease but blindness, which had seized him not above four or five years," &c.

Seth Unthanke. Related by Dr. Baynard.

"There is at Bath an old fellow, in the summer time, who is an assistant to the playhouse. I have observed this old fellow, once in a week, or sometimes oftener, to go to a milk-house, (where I used often to drink milk,) to fill a great pitcher (which held at least six or seven quarts) of new buttermilk, but always kept it until it was sour, and then drank of that, and nothing else, all the summer months, (*i. e.*) from April and May until October; the remaining part of the year he drank either water or small beer, though he told me that in his youth he had sometimes drank strong drinks, but they never agreed with him; and he also told me, that, not two years ago, he went from Bath to London on foot, in two days, and then came home to

Bath again in two days more, and that he was then near eighty-seven years of age, as may be seen by the register. He is a straight, upright man, without stooping, and of his great age moves wonderfully nimble. He has an ungrateful name, though an honest fellow, for it is Seth Unthanke. His eldest sister has been dead a year. Of twenty-two children, he has a brother living, 10 years older than himself; his eldest brother has been dead three years. He has a sister living in Spittle, within half a mile of Berwick, 16 years older than himself. His uncle was 126 years old when he died; he was a pensioner to the Bishop of Durham."

Sir John Floyer, in his work on "Cold Baths:." "Richard Lloyd, born two miles from Montgomery, was aged 133 years within two months; a strong, straight, and upright man; wanted no teeth; had no gray hair, it all being a darkish brown colour; could hear well, and read without spectacles; fleshy and full-checked, and the calves of his legs not wasted or shrunk; he could talk well. He was of a tall stature; his food was bread, cheese, and butter, for the most part, and his drink whey, buttermilk, or water, and nothing else: but being by a neighbouring gentlewoman persuaded to eat flesh meat, and drink malt liquors, soon fell off, and died. He was a poor labouring man in husbandry, &c. To the truth of this, the copy of the register produced affirmed it." Sir John Floyer concludes his remarks in the following quaint style: "A hundred examples of this kind may be found to confirm the doctrine of temperance and cool diet, as necessary to the prolongation of life; but if an angel from heaven should come down and preach it, one bottle of burgundy would be of more force with this claret-stewed generation than ten tuns of arguments to the contrary, though never so demonstrable and divine."

Sir William Temple, among other narratives of long-lived persons, relates one of an old man who begged usually at a lonely inn upon the road, in Staffordshire. He was 124 years old. Sir William Temple inquired of the man what his usual food was: "He said, milk, bread and cheese, and flesh when it was given to him. I asked him what he used to drink: he said, 'Oh, sir, we have the best water in our parish in the whole neighbourhood!' Whether he never drank anything else? He said, yes, if anybody gave it him, but not otherwise. The host told me, he had got many a pound in his house, but had never spent a penny."

Francis Hongo, died, A.D. 1702, aged 114 years, ten months and twelve days. He left behind him forty-nine children. He was never sick. His sight, hearing, memory, and agility, were the surprise of all. At 110, having lost all his teeth, he cut

two large ones in his upper jaw, one year before he died. He used for drink only water; never wine, strong waters, coffee, or tobacco. His habits in other respects were temperate.*

Miscellanea, contains a very remarkable account of an old man, 120 years of age, without the loss of a tooth, and of a brisk and lively disposition, whose drink, from his infancy, was pure water.

Andrew Tieraqueaus, the famous civilian, who is said, for thirty years together, to have given yearly a book, and, by one wife, a son, to the world, never drank anything but water from his infancy.—*Vide* “The best and easiest Method of preserving uninterrupted Health to extreme Old Age,” &c. From a manuscript found in the library of an eminent physician, lately deceased, 8vo. published 1748, p. 64. His life is in Bayle’s Dictionary†.

Thomas Parr, of Shropshire, died in 1635, aged 152 years and nine months. He was a man of abstemious habits and regular mode of life. In 1635, he undertook a journey to London, by desire of the King. The royal bounty and change in air and diet probably hastened his death. Taylor, the water-poet, describes his usual beverage, or, as he facetiously terms it—

his daily swig

Milk, buttermilk, and water, whey and whig.

Henry Jenkins, of Yorkshire, died in 1670, aged 169 years. He was a man of active life and sober habits, and retained his sight and hearing to the last. At the age of 160 he bound sheaves of corn for farmers, having abandoned his original employment as a fisherman.

I. Effingham, of Cornwall, died in 1757, aged 144. He had been accustomed from his infancy to labour, and for many years served as a common soldier and corporal. He afterwards worked as a day-labourer until his death. In his youth he never drank strong or stimulating liquors. He always lived temperately, and seldom ate animal food. Until his 100th year, he was almost a stranger to sickness. Eight days before his end he walked three miles.

William Aldridge died in 1698, aged 114 years. He was remarkable for his retentive memory and sober habits.

John Woods died in 1818, aged 122 years. He was regular and sober in his habits, and exceedingly abstemious with regard to his diet.

Jonatham Harlop, of Aldborough, Yorkshire, died in 1791, aged 138. He could read to the last without spectacles, and enjoyed an uninterrupted flow of spirits. On Christmas day, 1789, he walked nine miles to dine with one of his great grand-children. He always ate moderately, and his only beverage was milk and water.

Thomas Winsloe died in 1796, aged 146 years. He was conspicuous for his sober habits and regular life.

Dr. William Mead, of Ware, Herts, died in 1652, aged 148 years and nine months. He was a physician of considerable reputation and extensive practice, and exceedingly sober and regular in his habits.

Anne Meynard, at her death aged 112, and buried at Finchly, Middlesex, in 1756. She was intelligent, and exceedingly sober and abstemious in her habits.

Thomas Laughher, aged 113, died in 1813, at which time he was living in remarkably good health. He walked well for his great age, rose at four o’clock every morning, and took a long walk before breakfast. He never drank strong beer, small beer, or spirits. His principal diet was coffee, tea bread, and water. His father died at the age of 97, his mother at 108, and his son at 80.

Mary Potter, aged 106, died in 1839, resided at Larkhall, near Bath. She never drank beer or spirits, and ate very little animal food. Her principal diet was bread and milk, tea, and vegetables. Her sight and memory were very good. She was cheerful and happy, although, from an attack of illness, unable to walk about.

Mr. Crossley, aged 100 years and nine months, died at Uttoxeter, September 26th, 1836. He retained the use of his faculties until the last. He was remarkable for his temperate habits, milk having been his principal beverage for many years before his death.

A Scotch Newspaper notices an old woman living at Glasgow, who is 130 years of age, and for the last fifty years she has taken nothing stronger than tea or coffee. She never had occasion to take a doctor’s drug, nor was a lancet ever applied to her frame. She is perfectly free from affections of the chest, and during the last century has been a perfect stranger to pain. Her pulse does not exceed seventy strokes in a minute. Her grandfather died at the age of 129, and her father died in the 120th year of his age. Her grandfather and father were very temperate.

Another old woman died recently in the western part of England. She was 110 years of age, leaving 450 descendants, more than 200 of whom attended her funeral. This woman had never taken any kind of intoxicating liquor until she was 30 years of age, remained a very moderate drinker twenty years, and for the last sixty years of her life never took anything of an intoxicating nature, unless occasionally ordered by her medical adviser.

Anne Parker died on Friday the 3rd of February, 1837, aged 109,—the oldest inhabitant of Kent. During her whole life she abstained from spirituous liquors, indulging only in tea.

Mrs. Letitia Cox died on the 26th of

* Livers, by Eugenius Philalethes, 1722, p. 91.

† Sinclair, “Code of Health and Longevity.”

June, 1838, at Bybrook, Jamaica. She outlived the eldest inhabitant in this parish for many generations. By her account, she was a grown-up young woman at the time of the destruction of Port Royal by an earthquake. She declared that she never drank anything but water during the whole of her life. She must have been upwards of 160 years old.

An old black woman, at Holland's Estate, died eighteen months ago, at 140 years old. She also declared she never drank anything but water.*

SECTION VI.

THE DISUSE OF ALCOHOL AS A MEDICINE.

So long as alcohol retains a place among sick patients, so long will there be drunkards; and who would undertake to estimate the amount of responsibility assumed by that physician who prescribes to the enfeebled, dyspeptic patient, the daily use of spirit, while, at the same time, he knows that this simple prescription may ultimately ruin his health, make him a vagabond, shorten his life, and cut him off from the hope of heaven? Time was when it was used only as a medicine; and who will dare to offer a guarantee, that it shall not again overspread the world with disease and death?—DR. MUSSEY.

It is the sacred duty of every one exercising the profession of medicine to unite with the moralist, the divine, and the economist, in discouraging the consumption of these baneful articles, and, as the first step in the scheme of reformation, to discountenance the popular notion of their medical efficacy.—PROFESSOR CHAPMAN.

I. The medicinal use of alcohol, a frequent source of intemperance.—II. The opinions and experience of eminent medical writers on this subject.

IN a previous section of this work some powerful facts were adduced to show that the use of alcohol, as a medicine, has been a prolific source of intemperance. At the present stage of the temperance reformation, the importance of the subject seems to require its more extended consideration.

A well-known writer in "Frazer's Magazine," not long ago related the following melancholy fact: "I could produce some dreadful instances of persons becoming confirmed drunkards, from being ordered to drink brandy-and-water instead of wine—formerly a favourite prescription of the English M. D. Perhaps the most remarkable of any was the case of a physician himself, who resided at Chester when I was a boy. He was a clever man in his profession, an elegant scholar, and temperate almost to an extreme. His digestive powers, however, becoming deranged, he was induced to drink brandy-and-water to restore them—and mark the result. He began with a little, and weak; but, unlike the pyramid,

that becomes 'beautifully less,' his glass increased in an inverted ratio, and his measure amounted to two bottles per day of the best Cognac, when he died a driveller and a sot."

About the time the above remarks were penned, an inquest was held on the body of Mrs. Selina —, who fell a victim to injudicious medical advice. She was found drowned, in the basin, opposite the palace, in Kensington Gardens, London. It appeared, from the evidence of her husband, a respectable architect, that the deceased had, on account of her weak state of health, been advised to take port wine, and strengthening potations. Her health was restored by these means; but, unfortunately, she imbibed such a partiality for wine and spirituous liquors, as to cause her husband and her own relations to relinquish all intercourse with their misguided connection. The jury returned a verdict of "Temporary derangement, brought on by continued intemperance."

Recent publications detail the following melancholy narrations: "A young female, in a menial situation, having suffered much from long-continued ill health, applied for relief to her medical adviser. He inquired into the nature of her complaint, and recommended her frequently to take a little gin, which he told her would render her essential service. Her friends, anxious to restore her to health, devoted a portion of their scanty means to secure her the possession of the lauded medicine. Their kindness, however, was of no avail; she became worse and worse; and at last applied to an eminent physician for further assistance. He candidly told her, that if she continued the use of the gin, it would most certainly conduct her to an early grave. Judicious medical treatment restored her health; the mischief, however, was irretrievably done; she acquired a craving for alcoholic stimulants, and is now a confirmed and abandoned drunkard."

"The wife of a respectable mechanic acquired habits of intemperance. The use of 'Chambers' Medicine,' with appropriate moral treatment, restored her to virtue and happiness, and for six years she was a sober, industrious woman, and an exemplary wife and mother. After her fourth confinement, being in rather a feeble state, her nurse advised her to take a little spirit; in three months, the exemplary wife and mother became a most pitiable drunkard! The constant habits of intoxication in which she found means to indulge rendered it necessary to send the child out to nurse. The poison worked its deadly changes; the loss of the use of her lower limbs, and mental faculties, entirely formed the prelude to a premature grave."

It is contended, by numerous medical writers, that the use of alcohol as a medicine is indispensable. Without entering, how-

* Jamaica Royal Gazette.

ever, into the consideration of its judicious and occasional use, it is requisite that we should inquire whether other medicines of similar properties and equal value are not accessible to the medical profession. The determination of this point renders it not less important to ascertain the influence of the practice, in a moral and Christian point of view. Medical men, as the guardians of the public health, are responsible for the evils which may result from injudicious advice or indiscriminate sanction. Humanity, too, demands a sacrifice. The ensnaring properties of alcohol are too well attested by mournful experience, and no legitimate means of removing the incalculable evils which it occasions should be left untried.

It may be urged with considerable force, that the value of alcohol as a medicine is no slight argument against its use as an ordinary beverage. Medicines, to be absolutely efficacious, must be administered only in cases of need; inasmuch as, when long continued, they lose their beneficial effects. This remark is correct, and to judicious minds, no doubt, will have its due influence; the mass of the people, however, are unable to appreciate its force.

The importance attached to their use by medical men, for the cure of disease, naturally leads to the crude but popular notion that these liquors possess extraordinary virtues; and hence many are induced by degrees to use as common beverages that which at first was intended only to be employed as an occasional remedial agent. The cravings of appetite, too, lend their aid to this dangerous delusion. The result has been melancholy in the extreme.

It is moreover a subject of deep regret that medical sanction should so freely be given to the common and dietetic use of alcoholic liquors. Such a practice, to say the least, is not only a departure from the limits of strict medicinal use, but a dangerous tampering with articles which experience stamps as peculiarly ensnaring in their nature. Some of the most eminent members of the profession, as detailed in previous sections, have unequivocally expressed their regret that the weight of their authority should have been given to a practice fraught with evil, whether it regards the physical or moral welfare of the human race. It is of importance to remember the well-grounded remark of Sir Ashley Cooper: "*We have all been mistaken: we have called these drinks stomachics and tonics when we should have called them stimulants.*"

The great source of mischief, in the common and indiscriminate use of alcoholic drinks, consists in the ignorance of the public of these latent abnormal conditions of the system, which exist to a remarkable degree in our large towns, and which the use of alcohol aggravates to a serious

extent. Future investigations will place this question in a stronger light. Most persons imagine that they are competent to prescribe wine or spirit and water, and accordingly act with thoughtless freedom, forgetful of the fact that their ignorance and inexperience on medical points renders them unable to detect those functional or organic diseases which sometimes are so insidious in their nature as even to perplex the most able and experienced member of the medical profession. "It is quite common," remarks Mr. Fothergill, of Darlington, "for medical practitioners, on being called to cases of fever or inflammation, to find that spirits, wine, hot spiced ale, or black beer, have been previously given as sudorific anti-spasmodics, or even as emetics, and still more frequently as cordials, and from a popular notion of their specific qualities. On inquiring of a person labouring under chronic inflammation of the pleura, as to his previous treatment, I was informed that he had been bled, and drank rum and milk every morning! In another inflammatory case, on hinting my suspicion that some strong liquor had been taken by the patient, the answer was, 'Only some black beer and rum; we thought it would make her sweat.' Such examples might be multiplied to almost any extent. In cases of debility, where there has been gradual diminution of strength, with loss of flesh, wine and malt liquors are constantly recommended by kind neighbours and friends, although these symptoms most frequently depend on functional or structural disease of some important organ which requires the utmost attention and skill of the experienced practitioner to discriminate with certainty and treat with success."

The use of alcoholic beverages in thousands of cases tends to frustrate the judicious treatment of medical men. In other instances it has been found that medical treatment has been more successful where their employment has been altogether discontinued. The following case is in point: "The master of one of the most extensive workhouses in the vicinity of the metropolis, Nov., 1835, forwarded a document, from which the following extract is made, to one of the members of the British and Foreign Temperance Society. In this establishment it was customary to use gin medicinally. The year before the document was written, the practice was discontinued.

	1827	1834
Number of inmates, average	239 ..	232
Consumption of gin ..	38 galls.	1
Number of deaths ..	31 ..	26
Average age of deaths	53 ..	58

The statements of Dr. Cheyne and others, given in a previous section, exhibit this result to a forcible and instructive extent.—Daily experience confirms the accuracy of past investigations.

II. *The opinions and experience of eminent medical writers on this subject.*

Dr. Reuben D. Mussey, Professor of Anatomy and Surgery, Dartmouth College, N. H., President of the New Hampshire Medical Society, and Fellow of the American Academy of Sciences, &c., &c., in his reply to the question "Is there any condition of the system of health or disease, in which alcohol is indispensable, and for which there is not an adequate substitute?" the above distinguished writer thus remarks: "As a vehicle for medicinal agents, alcohol has held a distinguished place. An extensive list of *tinctures*, or spirituous infusions of vegetable articles, and of alcoholic solutions of mineral substances, is still found in our dispensaries. In a highly scientific work of this kind, lately published in this country, there are given the methods of preparing about one hundred and fifty tinctures!

"The tonic barks, and roots, and wood, impart more or less their medicinal properties to distilled spirit; and, thus imparted, these properties are preserved for a considerable length of time. Of these preparations, however, it may be observed, that the spirit often so modifies the impression made upon the stomach, brain, or blood-vessels, as to prevent their being given in doses sufficient for the objects intended. This is the case in certain forms of gastric and intestinal irritation, accompanied with an unnatural irritability, not only of the ganglionic nerves, but of those belonging to the cerebro-spinal system. Cases not unfrequently occur where the decoction or *watery* infusion of the Peruvian bark is altogether preferable to the tincture; and perhaps there is never a case in which some preparation of quinia, as the sulphate for example, is not decidedly better for the patient than any alcoholic infusion of the bark.

"The spirituous preparations of opium are in many if not in all cases inferior to the black drop. The stomach has been known, in a state of great irritability after excessive vomiting, to retain the black drop, or one of the salts of morphia, when the tincture of opium was perseveringly rejected.

"In those cases of excessive irritability of the stomach, accompanied with spasms of its muscular coat, and also that of the intestines, in which external anodyne applications are indicated, the warm black drop upon the abdomen, or the (dry) acetate of morphia applied to a blistered surface, is altogether more efficient than the tincture of opium. I have repeatedly witnessed a much happier effect from the simple acetous solution of opium locally applied, than from the spirituous solutions, in relieving the agonizing pain of phlegmasia dolens.

"The medicinal qualities of the tonic and narcotic vegetables may be preserved without decay in the form of the elegant prepa-

rations which owe their existence to the perfection in chemical processes invented in our own times; and these preparations may be employed without alcoholic or any other admixtures which would serve to modify or impair their effects. The *Materia Medica* then would sustain no loss if alcohol were wholly given up as a vehicle for these classes of medicines. The same is true of its combination with the active principle of the Spanish fly. This article yields to water and to vinegar its active properties. A strong vinegar of flies is a better vesicant than the alcoholic infusion; and the chemical extract named cantharidin unites readily with oil as a vehicle, and in this form may be most conveniently employed for the purpose of making a blister.

"The essential oils, the balsams, and the resins, may unite with or become diffused in water by the aid of sugar and gum-arabic, or by the admixture of ammonia, where this can be done without too far modifying their medicinal effects.

"These mixtures, called *emulsions*, admit of the medicinal article being taken at any requisite degree of dilution. They are greatly to be preferred to the alcoholic solutions, inasmuch as these last are precipitated in the form of a white or brown cloud, or in a mass of small globules, the moment they are thrown into water, and are thus less equally diffused in the water than when combined with it through the medium of sugar, or some other suitable article.—Camphor may be very effectually comminuted and diffused in water by rubbing it with calcined magnesia, and adding water slowly.* This is a more uniform mixture, and more convenient for external exhibition, than can be made by mixing the spirituous solution with water.

"The emulsions, then, of these articles as medicines, to be taken into the stomach, are decidedly preferable to the alcoholic solutions, or tinctures, as they are called. If an attempt be made to swallow these tinctures without diluting them, they are not only found too pungent, or acrid, but they are at once precipitated by the fluids of the mouth and throat; and when the tincture of guaiacum, or of tolu, is taken, the resinous matter is at once spread out upon the surface of the tongue and mouth, in the form of an adhesive coating of varnish, which is dislodged with difficulty.

"As a remedy itself, in various forms of disease, alcoholic stimulus has long been regarded with high consideration. In the slight departures from the equable healthy living actions of the body, marked by exhaustion from fatigue, loss of blood, hunger, thirst, and exposure to great heat or cold, which approach the state of syncope or fainting, some kind of intoxicating

* 'Camphor is soluble in strong acetic acid.'—Turner's Chemistry.

liquor is generally resorted to as if it were the only remedy; but in some of these states this kind of stimulus is not quite safe, and in none of them is it absolutely necessary.

“A draught of bland liquid—as simple water, or sweetened water, or milk and water, or cocoa, or some other simple nutritious substance, as some liquid farinaceous preparation, or the pulpy or juicy part of fruits, or the tea of some aromatic herb, or a drop or two of one of the essential oils, as those of the mint tribe, diffused in water by the aid of sugar, or a small dose of carbonate of ammonia, or simple ammonia well diluted with water—taken, one or more of them, at a temperature suited to the state of the stomach and of the circulation, and repeated at proper intervals, will accomplish every good purpose of alcoholic stimulants, and in most cases with less exposure of some of the functions to undue or dangerous excitation. In the prostration, for example, occasioned by long exposure to cold, the introduction of a stimulus so exciting and uncongenial as distilled spirit into the stomach, makes an impression upon its nerves too strong and unnatural, and a transition from a state of languor and exhaustion to that of activity, too sudden to comport with an economical expenditure of the vital power, tending to create a predisposition to some form of disease, if not speedily to excite it.

“In a complete *syncope*, or fainting fit, cold water dashed upon the head and face, ammonia, or some essential oil, or both, passed into the nostrils or into the mouth and throat, will do more than any preparation of alcohol towards a speedy and effectual resuscitation.

“Ammonia and the essential oils exert an agency different in kind from that made by alcohol. If in a sense they are diffusible, their impressions being readily transmitted from one part to another, they are not intoxicating. They seem to stimulate the brain only indirectly, perhaps through the medium of a slightly-increased action of the blood-vessels, causing, like muscular exertion, a brisker motion of the blood in the brain; but they do not make the same apparently direct, unnatural, poisonous, bewildering, and exhausting impression upon the whole power of the brain and nerves as that which is derived from alcoholic stimulus.

In *dyspepsy*, the alcoholic treatment is now, fortunately, almost universally abandoned. Experience has at length taught physicians that the irritations, chronic or subacute, of the living membrane of the alimentary canal, the capricious excitement of the nervous system, and the slight but obstinate deviations from the healthy standard in the circulation, may be more easily and permanently controlled under the influence of a plain diet, suitable clothing, bathing, frictions, exercise in the open air, proper hours for sleep, and a light and agreeable

occupation of the mind, than under the use of any kind of intoxicating drink, in any manner administered.

In *strumous* constitutions, and under the local developments of *scrofula*, ardent spirit was formerly employed. But who, at this day, would think of placing it in competition with the preparations of iodine, employed at the hospital of St. Louis, in Paris, and in other places, joined with proper diet, bathing, frictions, exercise, air, &c.?

In the whole range of *nervous diseases*, alcohol, in any shape, is entitled to but very limited confidence. It seems to be incapable of doing anything better than to cause a transient alleviation, while its ultimate effects are pernicious, with the exception perhaps of that state of the brain and nerves exemplified in *traumatic tetanus*, which requires a narcotic influence. For this purpose the combinations of morphia, either internally given, or externally applied, especially to a blistered surface, are to be preferred.—A tonic or sustaining power in the treatment of this disorder may better be derived from the judicious use, in addition to the morphia, of some vegetable tonic, as the sulphate of quinia, joined perhaps with carbonate of ammonia, than from spirituous drinks.

“In *inflammations*, whether deep-seated or superficial, the vascular and nervous irritations are usually observed to be increased by the use of alcoholic liquors; sometimes a soothing effect is seen to follow the application of spirit to an inflamed part. But how is this accomplished, if the internal exhibition of it be pernicious? Without much doubt, by the great abstraction of morbid heat caused by the rapid evaporation of the spirit from the inflamed part, and by its anodyne or stupifying influence, which is ultimately exerted upon the irritated nerves, unremittingly drenched in it by its persevering application. The brain, at the same time, and the nerves not directly involved in the inflammation, receive but a slight impulse from the spirit so circumscribed in its application; the morbid impression they may receive from the medicine being more than compensated for by the diminution of local heat and irritation.

“The persevering local use of alcohol appears to enfeeble, as it might be expected to do, the vital powers of the part, while water may be applied for any length of time required by the inflammation, without an undue local exhaustion of vitality.

“In a case of simple fracture of the leg of a boy, several years ago, in which common spirit diluted with water was locally employed for two or three weeks, there was in five weeks so slight a union of the fracture that a very small force broke it down. This effect seemed fairly to be attributable, chiefly, at least, to the influence of the spirit, in part, over and above what resulted from the escape of heat by evapora-

tion, especially as the limb was so covered as to prevent the sensation of cold, the fragments were kept in undisturbed contact, and the general health was pretty good. A considerable number of surgeons at the present day prefer simple water to every other lotion for the purpose of moderating excessive excitement in local inflammation.

"In the treatment of gangreen, intoxicating drinks bear no comparison with opium or the salt of morphia, carbonate of ammonia, and sulphate of quinia.

"To the morbid conditions of the system in fevers, alcohol, as a remedial agent, is far from being well adapted. It bears no comparison with sulphate of quinia as an article suited to break up the morbid associations in intermittent and remittent fevers, after suitable evacuations.

"In the *apyrexia*, or remission of the paroxysm of continued fever, there are probably but few physicians in our country, who have seen a large febrile practice the last twenty-five years, who have not had occasion to regret its unfavorable effects. Under the stimulant practice, trains of morbid symptoms are often aggravated, new centres of irritation established, and which, if not sufficient to destroy the patient, prolong the period of the fever, and frequently cause relapses or a lingering and interrupted convalescence. In the occasional states of depression occurring in continued fever, those internal stimulants should be preferred, if any be used, which exhaust the nervous power less than the intoxicating articles. In this connection may be named the carbonate of ammonia, camphor, and some of the essential oils.

In the collapse and prostration of cholera, the spirit practice is now very generally acknowledged to have been unfortunate. Indeed it would have been remarkable if an article which so strongly predisposes to this disease, as alcoholic stimulus, should have proved to be its best remedy. The evidence of the mischievous effects of spirituous drinks in cholera is too generally diffused to require its being introduced here in a formal manner. Ice, cold water, or even ice in small bits, swallowed at short intervals, may be more relied on for allaying the deadly nausea of cholera than any form of intoxicating liquor. For the purpose of restoring the strength in the debility which follows acute disease, is alcohol necessary?

If the fever or inflammation have been early treated with the proper evacuants, and the progress duly watched, and local determinations prevented or obviated, the debility which remains on the subsidence of the disease is easily removed. The patient may be greatly reduced in strength, but, when free from disease, his convalescence is rapid under the most simple treatment. But when the stimulant plan has been perseveringly pursued, with a view to

remove the disease or the debility subsequent to it, how often, if the constitution can resist the action both of the disease and of the medicines, is the patient observed to linger for weeks, and perhaps months, before his health is re-established; and how often is he subjected to some new form of disease, either subacute or chronic, or perhaps both in succession, a cough, or difficult breathing from bronchial or thoracic irritation or effusion, an enfeebled and irregular action of the alimentive organs, a swollen limb, &c.? In illustration of these remarks, the following sketches of actual cases are given, the facts of which may be fully relied on:—

"Dr. R., æt. twenty-five, possessing a good constitution, had, in February, 1806, a severe typhus fever, which showed symptoms of crisis on the twentieth day. He took, early in the disease, purgative doses, containing calomel, and afterwards, small doses at short intervals of the same article, which, in ten or twelve days, occasioned a slight soreness of the mouth; soon after this, aphthæ being observed in the throat, bark and wine were prescribed. The bark, however, was soon omitted, on account of the great distress it seemed to have occasioned at the pit of the stomach, but the wine was continued. In three or four days after the symptoms of crisis were observed, a cough arose, which was very troublesome for about a week; but, as it subsided, a swelling, attended with pain and heat, seized the whole left lower limb. In six weeks from the attack of the fever, the patient began, by the aid of a staff, to hobble out of his chamber. The swelling of the limb, however, although bandaging was employed for several weeks, was never wholly removed; and from that day to the present, upwards of twenty-seven years, the leg has exhibited a varicose state of its superficial veins, and the whole limb including the foot has been larger and less vigorous than the other, proving that its organization was permanently affected. Before the fever, and until after the crisis, this limb was, in the estimation of the patient, as sound in every respect as the other. If in this case the processes of nature had not been interfered with by an unnatural excitation of the nerves and blood-vessels, is it probable that any form of local disease would have shown itself simply as the effect of the fever? One result rather inconvenient to the patient as he has often remarked, of the use of wine during this convalescence, was the acquisition of a strong relish for that beverage which he had never before felt, and which at various periods since it has required some effort properly to control.

"Mr. F., æt. eighteen, tall, and of a fair complexion, having I believe always enjoyed good health, was attacked with continued fever in Autumn. He was bled repeatedly, and took purgatives and antimo-

nials. At the end of the second week it was thought that he would bear tonics. Mild articles were resorted to, and continued about a week. The symptoms remaining nearly the same, sulphate of quinia and wine were prescribed. In a few days he had cough and difficult breathing, with symptoms of effusion in the chest. Auscultation readily detected a fluid in the right cavity. Blisters and diuretics with active cathartics were now employed. He was soon relieved, and in about a week his symptoms were very much as when he began to take the wine and quinia, excepting that the debility was greater. Wine and the sulphate of quinia were again given, and soon the same train of symptoms appeared as before, with an effusion of fluid in the left cavity of the chest. Under the use of diuretics and blisters, these symptoms were removed.

"A third time the wine and quinia were resorted to, and the result was a swelling of one of the lower limbs, with heat and pain, resembling somewhat the appearances in phlegmasia dolens. All tonics and stimulants were now laid aside, and at a time when he was unable to turn himself in bed. A mild diet was now prescribed, together with ablutions and frictions; and he very gradually and uniformly recovered, so as to have acquired a tolerable degree of health in about four months.

"In the course of the treatment, valerian, carbonate of soda, carbonate of ammonia, camphor, serpentaria, and sulphuric acid, were employed. We varied the combination of the medicines a great many times; a measure which seemed to be rendered necessary by sickness at the stomach, which invariably followed each combination in a day or two. At the time when he rejected stimulants, and in fact all medicines, he could retain articles of food."

"Mr. H., æt. twenty-five, of a fine constitution, had remittent fever. In one full day of his sickness, that is in twenty-four hours, he took three pints of brandy, and, in addition, a small pill of opium every two hours, besides a small dose of sulphate of quinia at the same intervals through the night. Spirit was taken freely for several days, although the quantity, as well as that of the opium and quinia, cannot be vouched for. Two years after this sickness the patient had not recovered his health but was still feeble, with impaired digestion and swollen limbs.

"But there are agents of higher importance than alcohol, or fermented liquors, which may safely be employed to sustain the sinking powers in fevers, and to restore the lost strength after they have subsided.

"Of these, the first to be named is pure air. 'I believe,' says Mr. James, in his valuable work on inflammation, 'there is no poison more injurious than foul air—no restorative more effectual than pure air; and

it runs no risk of disordering the digestive organs, as bark often does, or stimulating the vessels too much, like wine.' The restorative powers of the blood depend on its purity, and the purity of this fluid cannot be secured without pure air; hence the absolute necessity of the most strict and persevering attention to ventilation and cleanliness.

"Another agent is *water*. This is the proper beverage when a beverage is needed. Nothing is so grateful in the thirst of fever, and nothing so good; and its febrifuge, as well as tonic or invigorating power, judiciously applied to the surface of the body, is most striking. Either pure, or impregnated with soap, or saline substances, it may be used by way of affusion, ablution, or sponging, at a temperature warm, cool, or cold, according to circumstances. The successful use of cold water by Dr. Currie, applied to the body in fevers, is well known.

"Dr. Robert Jackson, speaking of the fevers of Jamaica, says, that 'after obviating particular symptoms of a fatal tendency, it was the principal indication to support the general powers of life, or to excite the tone and vigour of the system.' For this purpose, he mentions 'cold bathing' as 'the most important remedy in the cure of the fevers of the West Indies.' For the purpose of removing the prostration and languor accompanying a form of fever prone to attack foreigners arriving in hot climates, he observes, that 'the principal trust was placed in warm and cold bathing, which, under proper management, seldom failed of answering every expectation completely, or of speedily removing the chief symptoms of danger.' This gentleman was in the habit of frequently impregnating the water strongly with common salt.

"Often have I witnessed in fits of distressing prostration, joined sometimes with great irritability of the nerves, both during and after the subsidence of the severity of acute disease, a far more refreshing and invigorating effect from sponging the head,* body and limbs with simple water, or weak warm soap-suds, followed by gentle friction, than from any doses of spirits, wine, or porter, I have ever seen administered. It is a striking remark of the celebrated Hoffman, that if there be in nature a universal remedy, that remedy is water.

"Among the means of restoring the strength, one of great value is exercise, especially in the open air. Indeed, there seems to be no adequate substitute for this remedy. Who has not felt its invigorating effects? Dr. Jackson, already quoted, observed the most happy effects in the restoration of the bodily powers reduced by yellow fever, from his patients, when too wake to raise their heads, being carried out

* The hair having been previously sheared off.

daily in carts or waggons. Passive exercise in the sick chamber, or the removal from it to an adjoining room on a truckle-bed or chair, may be made very useful to the sick patient, when his strength is too much reduced to admit of his being carried abroad.

"In addition to the common articles of plain, unstimulating food, may be mentioned, as an important restorative agent, fresh, ripe fruit. This, especially if acidulo-saccharine and juicy, often presents to the stomach precisely the stimulus it craves, and may be borne when spirit and wine cannot be taken without disturbing the circulation. The man who shall invent a cheap and easy method of preserving without decay the well-ripened, juicy, and pulpy fruits, will be entitled to the thanks of succeeding generations. Could the grape, instead of being manufactured into wine, be carried fresh and distributed freely in distant countries, in place of the intoxicating liquor with which it now supplies them, an unspeakable amount of health and comfort would result to the human family.

"With prescribed attention to ventilation, cleanliness, ablutions, and frictions, plain nourishing food, including often fresh fruits, joined with early and persevering exercise, I have known patients to recover with a rapidity greater than I remember to have observed from any use whatever of intoxicating drinks and narcotics.

"Under a more perfect acquaintance with the functions of life, and with the influences exerted upon it by remedial agents, may it not be hoped that the period will arrive when not only ardent spirit, but all intoxicating liquors, will be regarded as not absolutely necessary in the practice of physic or surgery? It may perhaps be worth remarking, that throughout the widespread kingdoms of animal and vegetable nature, not a particle of alcohol in any form or combination whatever has been found as the effect of a single living process, but that it arises only out of the decay, the dissolution, and the wreck of organized matter, or of its ever-varied and wonderful productions; and is it possible that the beneficent Author of such a countless multitude of medicinal agents as exist in the products of vital action, would have left to be generated among the results of destructive chemistry, an article essential to the successful treatment even of a single disease?

"The profession of medicine has an extensive scope. It looks into the structure of animal machinery, it investigates the laws of its vital movements, both in health and disease, and contemplates a variety of influences by which its complicated processes are accelerated, retarded, suspended, or destroyed. It learns, that to the functions of life belongs a standard rate of action, beyond which they cannot be safely excited or driven; that alcoholic and narcotic stimulants derange and confuse the healthy

movements, exhaust the vital power more than nature intended, and induce premature decay and dissolution. This profession claims the strictest alliance with the cause of humanity; it cherishes good will, and proffers substantial blessings to man. It extends its hand not only to the exhausted, bed-ridden patient, and to the tottering and dejected invalid, but even to the healthy man, to save him from the pain and suffering which ignorance, or custom, or recklessness might bring upon him.

"Let physicians then be true to their profession. Let them study the duties they owe to the communities with whom they live and labour. Let them teach the means of preserving health, as well as of combating disease. Let them show, as it is in their power to do, that the taking of medicine in health in order to prevent disease is most absurd and mischievous; that the surest guarantee of health is a correct regimen, and that the best treatment of acute disease is often very simple.

"Let them explain, as far as practicable to those around them, the mechanism of their physical organization, and when it can be done, *knife in hand*, the work will be easy. Let them expound, so far as known, the beautiful and harmonious laws enstamped upon this organization, by which its complicated movements and diversified phenomena are sustained,—laws as immutable in their nature, and inflexible in their operation, as those that hold the planetary system together; and, like them, originating in the same incomprehensible and mighty mind, which, acting in the strength of its own philanthropy and unchangeableness, gave to man a moral code from amidst the smoke and thunders of Sinai. No law coming from this high source can be violated with impunity; and he who infringes a law of the vital economy, receives, in an injury done to the machinery of life, the penalty of his transgression, with no less certainty than he who leaps from a tower heedless of gravitation. With all its given power of accommodation to circumstances, no possible training or education of this machinery can change the nature of its primitive adaptations, and make an article congenial and healthful, which was originally repulsive and noxious. No human ingenuity or perseverance can render impure air as wholesome as that which is pure, or any form of intoxicating liquor as healthful as water."

The above judicious remarks are extracted from a Prize Essay which obtained a premium of three hundred dollars. Among other distinguished gentlemen who formed the committee by whom the award was made, were, John C. Warren, M.D., Professor of Anatomy and Surgery, Harvard University, Boston; Thomas Sewall, M.D., Professor of Anatomy and Physiology, Columbian College, Washington, D.C.; Parker

Cleveland, M.D., Professor of Chemistry and Materia Medica, Bowdoin College, Maine; and Benjamin Silliman, M.D., Professor of Chemistry, Yale College, New Haven, Connecticut. The professional character of these individuals gives increased weight to the opinions of Dr. Mussey.

Dr. Thomas Sewall, Professor of Anatomy and Physiology, Columbian College, Washington, D.C.: "While we are convinced that there is no case in which ardent spirits is indispensable, and for which there is not an adequate substitute, we are equally assured, that, so long as there is an exception allowed, and men are permitted to use it as a medicine, so long we shall have invalids and drinkers among us. Only let our profession take a decided stand upon this point, and intemperance will soon vanish from our country." Again, at a more recent date, the same eminent individual writes: "I have learnt from observation, that most of the cases of relapse, in those who once reformed, have arisen from substituting for ardent spirits some of the milder drinks, such as wine or beer; and I am sorry to add, that some of the cases of a return to intemperance which have fallen under my observation, have commenced with the prescription of the physician, or his incautiously allowing the use of those drinks during an attack of indisposition,—a practice generally unnecessary and always hazardous. From years of observation, I am convinced, that all intoxicating drinks should be utterly abandoned, as well in sickness as in health, as the only way in which a permanent reformation can be secured to the reformed drunkard."

Dr. John C. Warren, Professor of Anatomy and Surgery, Harvard University, Boston: "The reservation of the use of alcohol, for cases of sickness, appears to be of little importance in a medicinal way; and if it leads to practical abuses, such a reservation should not be made."

Dr. Charles A. Lee, of New York: "There can be no doubt that a large proportion of the formulas contained in our pharmacopœias, for the preparation of tinctures, might be dispensed with. Instead of 150, which are found in one of our latest, we believe that, at most, 30 would answer every purpose. Most of the tonic barks, roots, and woods, which are now administered in a spirituous menstruum, contain an alkaline salt, which is soluble in water, and a bitter principle, which is imparted to the same medicine, and on which the active properties for the most part depend. Besides, where tonics are indicated, the stimulating and intoxicating properties of alcohol are often injurious, and a watery infusion of the medicine, in the form of powder, is far more beneficial: all the spirituous preparations of opium ought to be dispensed with, as the acetic, or vinegar, is in all cases preferable where a liquid form is required;

in all other cases, it may be given in substance, or its extracted alkaline salt. With respect to the use of alcohol in disease, it is now admitted by our most scientific and skilful physicians to be rarely necessary. We believe that a great change has taken place in the opinions and practices of physicians on this subject, and that there are but few forms of disease which are now thought to require alcoholic stimulus. Our *fevers*, with the exception perhaps of *typhus*, which is extremely rare, get well without it; *dyspepsia* is no longer treated as a disease of debility; nervous complaints are made worse by it; and convalescence from all diseases goes on with greater safety and regularity when left to the aid of bland nourishment and simple diluents. Still we are not of the number of those who believe that the time will soon if ever arrive when vinous and spirituous preparations can be wholly dispensed with in medicine. Articles which are always injurious in health may and do prove to be highly useful remedies in disease. It is so with arsenic, opium, and alcohol. Indeed, it is thus established fact, that alcohol is a medicinal agent, that proves its inadaptation to a state of health."

Dr. Morgan, President of the Bath District Branch of the Provincial Medical and Surgical Association: "Having been engaged in active practice for more than twenty six years, sixteen years sole physician to Whitworth Fever Hospital, Dublin, and twenty years one of the Physicians to the Dublin General Dispensary, I have had pretty extensive experience, not only in acute but chronic diseases, and not among the higher classes only, but also among the poorest of the poor. The Materia Medica furnishes as efficacious and far more potent stimulants than any we possess in the form of intoxicating beverages. I am utterly ignorant of any disease, acute or chronic, in any rank of life, which cannot be cured without intoxicating drinks. Medical men contend that they are an agreeable and convenient form for the exhibition of stimulants, but that there is any disease incurable without their aid, is an assertion which I never yet have heard."

Dr. R. D. Thomson, Professor of the Theory and Practice of Medicine, University of Glasgow: "I believe it is universally admitted by scientific men, that alcoholic fluids, when employed in medicine, influence the system in those diseases in which they prove efficacious by their stimulating properties, and hence they may be superseded by stimulants possessing equally energetic powers."

John Higginbottom, Esq., M.R.C.S., of Nottingham: "I have for the last seven years most conscientiously banished intoxicating drinks from my practice as a medi-

eine, and I have never seen patients injured in their health by the loss of them."

John Fothergill, Esq., M. R. C. S., of Darlington: "Of all the articles of popular *Materia Medica*, there are none so frequently used, so seldom required, or so dangerous to administer, as ardent spirits, wine, and malt liquors; and their total rejection would be the means of preventing the ruin of many constitutions, and the loss of innumerable lives, which are now sacrificed, directly or indirectly, to their injudicious employment." And again: "During the last year I have attended a great number and variety of cases of midwifery, diseases, accidents, and operations, in which I should formerly have administered fermented or distilled liquors; yet I am not aware that I ever had more satisfactory results than since I gave up prescribing those drinks. About this time last year, I was attending a considerable number of parish and dispensary patients in severe typhus fever, in some of which my practice was closely watched by an intelligent clergyman, who would have supplied wine at the slightest hint from me. These cases afforded me very great satisfaction, convalescence being steady and rapid."

Thomas Beaumont, Esq., M.R.C.S., President of the Bradford Medical Association: "My opinion, formed upon long and extensive practice, is, that there are few diseases, if any, which cannot be successfully treated, without the aid of alcoholic drinks. It is my deliberate conviction, that those medical men who repudiate the general employment of intoxicating drinks, and advocate the principles of total abstinence, must succeed more in their practice than those who hold fast by the hackneyed opinion that these drinks are absolutely necessary for the successful treatment of the various diseases to which humanity is liable."

Other testimonies, equally luminous and forcible as those adduced above, are in the author's possession. They tend to prove the extent of the delusion which has for so lengthened a period, and with such fatal consequences, occupied the public mind. Investigation still goes on; prejudice is being overcome; and, ere long, it is to be hoped, that a final reformation will be effected, which is of paramount importance, whether it regards the physical, social, moral, or religious welfare of the human family.

THE END.



